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AIR ENFORCEMENT BRANCH
U.S. EPA. REGION 5

April 4, 2008

VIA FEDERAL EXPRESS OVERNIGHT DELIVERY

Attn: Compliance Tracker, AE-17J
Air Enforcement and Compliance Assurance Branch
U.S. Environmental Protection Agency
Region 5
77 West Jackson Boulevard
Chicago, IL 60604

Dear U. S. EPA Region V Representative:

In response to EPA's latest Clean Air Act Section 114 Request for Information received last month, U. S. Steel is providing the following information and attachments. This latest request, which contained the inquires below, was a follow-up to U. S. Steel's responses to a previous EPA Clean Air Section 114 Request. A certification page is provided immediately prior to the attachments.

The inquiries as provided in the request along with U. S. Steel's responses are provided below.

1. Provide a narrative description of how U. S. Steel accounted for blast furnace pressure relief valve emissions (also termed safety vales, bleeder valves, or dirty gas bleed) into its Clean Air Act permits.

   U. S. Steel Response: Blast furnace pressure relief valves are considered an integral part of the blast furnace and serve the safety function of relieving the pressure inside the furnace during times of start-up, shutdown, and malfunction. The bleeders are used when there is dangerous, excess pressure in the blast furnace. The bleeders are also used when a furnace is down for a period of time. For these reasons, U. S. Steel has not separately addressed the relief valves in its Title V permit application materials; nor has the Indiana Department of Environmental Management (IDEM) identified or regulated the relief valves separately from the blast furnaces.

   In addition, U. S. Steel reports the emissions of carbon monoxide, $PM_{2.5}$, and PM_{10} from the bleeder valves as part of its STEPS emission reports. U. S. Steel uses emission factors from FIRE (EF-45) when completing the emission reports. These reports are provided to IDEM on an annual basis as required by Rule 6 of Article 2 of IDEM's Air Permit Review rules (326 IAC 2-6).

2. Provide a copy of the portions of the Title V application that reference any and all blast furnace relief valves or their emissions.

   U. S. Steel Response: As noted above, U. S. Steel has not separately identified the bleeder valves in its Title V application because the bleeder valves are an integral part of the blast furnace proper. Even if the emissions were to be segregated from the blast furnace, such emissions would be considered insignificant according to 326 IAC 2-7-1(21).

3. Per the October 26, 2007, Section 114 Clean Air Act Information Request, U. S. Steel submitted Table 1, below, which is a partial summary of maintenance records for equipment subject to 40 C.F.R. Part 61 Subpart V. For each record identified in Table 1, provide the following information (where applicable):

   a. Identification number(s) [Tag Number] of the equipment that required repair.

   b. Provide details as to how the leak was identified; visual, periodic monitoring, or other;

   c. Instrument reading for the leak;

   d. Date of initial attempt of repair, including the instrument reading, in part per million (ppm), confirming the leak repair;

   e. Date of final attempt at repair (if the repair date is different for those provided below [in Table 1], please correct the date), including the instrument reading, in ppm, confirming the leak repair;

   f. A copy of the work order generated for the repair;

   g. Any other documentation or field notes regarding the repair;

   h. Date of the previous two EPA Reference Method 21 readings for the component along with the ppm reading; and

   i. Copies of the two prior weekly visual inspections performed on pumps prior to each leaking pump record below [in Table 1].

   U. S. Steel Response: EPA's request above is a follow-up request to U. S. Steel's prior response to the original EPA Section 114 Inquiry No. 20 – "Provide all maintenance records for any equipment subject to 40 C.F.R. Part 61 Subpart V from January 2002 to present. Include records for maintenance requests related to equipment leaks." When responding in December 2007, U. S. Steel inadvertently provided EPA with non-responsive incident reports and information

along with the responsive information. The non-responsive information was inadvertently provided because the recordkeeping system for the light oil system includes both Subpart V and non-Subpart V equipment. While the equipment identification indicates what is subject to Subpart V, we mistakenly included information regarding equipment that is not subject to Subpart V in our prior response. As provided in Attachment A, U. S. Steel is clarifying what incidents and corresponding records are actually responsive to the original request. Please refer to Attachment A, where U. S. Steel distinguishes Subpart V equipment from other light oil equipment; and provides the above-requested information for the Subpart V equipment.

4. For the leaks identified in Table 1 from an incident report, provide the following information:

    a. The composition of any wastewater that spilled;

    b. How the quantity of wastewater spilled was estimated and or calculated;

    c. Was the wastewater recovered;

    d. If recovered, provide the procedures taken to recover the wastewater and where it was returned to in the process (if applicable);

    e. Was this spilled in US Steel's Total Annual Benzene reports.

U. S. Steel Response: As noted above, the light oil system consists of equipment that is subject to Subpart V as well as equipment that is not subject to Subpart V. While U. S. Steel recognizes that EPA prepared Table 1 based upon our previous response, nearly all items identified in the Table 1 Summary provided by EPA do not involve Subpart V equipment and are therefore not responsive to the EPA inquiry.

While U. S. Steel accounts for benzene from the incidents identified in response to Inquiry 3, above, i.e., original Inquiry No. 20, U. S. Steel does not calculate the above factors for every individual pump drip or packing seal leak. Instead, U. S. Steel has developed an engineering estimate of releases related to packing seals and pump drips as noted in Section 3 of its TAB report. (These estimates were based upon actual measures of past packing seal leaks, pump drips, etc.) This procedure has been used and documented in past TAB reports. For specific information regarding this estimation procedure and to respond to this inquiry, U. S. Steel is providing EPA with a copy of its 2006 TAB report as Attachment B. As noted in the attached TAB report, we estimate some volume of packing leaks from all pumps that do not have mechanical seals. We account for maintenance drainage volumes from all pumps, regardless of seal type. We also account for some volume of drainage from all instrumentation in the plant.

Should you have any questions regarding this response or the attachments, please contact me.

Very truly yours,

David W. Hacker

cc: Thomas Easterly, Commissioner
Indiana Department of Environmental Management
100 North Senate Avenue
Indianapolis, IN 43204

K. Mentzel (w/out attachments)
J. Alexander
J. Volanski (w/out attachments)
T. Woodwell (w/out attachments)
M. Jeffrey

DWH:mmh

CERTIFICATION

I certify under penalty of law that I have examined and am familiar with the information in the enclosed documents, including all attachments. Based upon my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statement and information are, to the best of my knowledge and belief, true and complete. I am aware that there are significant penalties for knowingly submitting false statements and information, including the possibility of fines or imprisonment pursuant to section 113(c)(2) of the Act, and 18 U.S.C. Sections §§ 1001 and 1341.

UNITED STATES STEEL CORPORATION
RESPONSE TO EPA SECTION 114 REQUEST

ATTACHMENT A
IDENTIFICATION OF ITEMS LISTED ON EPA TABLE 1 THAT ARE SUBJECT TO SUBPART V

UNITED STATES STEEL CORPORATION – RESPONSE TO EPA INQUIRY NO. 3

Leak Date	Repair Date	Type of Report	Leak	3.a. Tag ID	3.b. Leak ID Method	3.c. Instr Reading	3.d. Initial Attempt	3.e. Final Attempt	3.f./g. WO or Other Docs/Notes	3.h. 2 Mos Prev Monitoring	3.i. 2 Wks Prev Visual Insps
12/12/05	1/25/06	Incident Report	Faulty valve on skimmer	NS	NS	NS	NS	NS	NS	NS	NS
8/29/05	10/7/05	Incident Report	Pinhole on valve on the 404 stripper	NS	NS	NS	NS	NS	NS	NS	NS
2/24/05	5/20/05	Incident Report	Blockage in drain trench	NS	NS	NS	NS	NS	NS	NS	NS
11/21/03	11/21/03	Incident Report	Packing leak on sump pump	NS	NS	NS	NS	NS	NS	NS	NS
9/15/03	9/18/03	Incident Report	Sump pump packing leaked	NS	NS	NS	NS	NS	NS	NS	NS
3/7/03	3/10/03	Incident Report	Bad seal and broken shaft on sump pump (big south)	NS	NS	NS	NS	NS	NS	NS	NS
11/12/02	11/11/03	Incident Report	Pump packing leaked	NS	NS	NS	NS	NS	NS	NS	NS
11/10/02	11/10/02	Incident Report	Plug blown on heat exchanger	NS	NS	NS	NS	NS	NS	NS	NS
6/25/02	6/26/02	Incident Report	O-ring failed	NS	NS	NS	NS	NS	NS	NS	NS
3/5/07	-	Operator Turn Report	Fitting leaking	NS	NS	NS	NS	NS	NS	NS	NS
3/8/07	-	Oil and Tar Log	Centrifuge sump not working and still leaking	NS	NS	NS	NS	NS	NS	NS	NS
3/19/07	-	Oil and Tar Log	Sump pump packing leaked	NS	NS	NS	NS	NS	NS	NS	NS
6/18/07	-	Oil and Tar Log	P-363B needs to be repacked	NS	NS	NS	NS	NS	NS	NS	NS
9/20/07	-	Oil and Tar Log	P-363B needs to be repacked	NS	NS	NS	NS	NS	NS	NS	NS

NS = this item or piece of equipment is not in benzene/VHAP service (less than 10%) and therefore not subject to Subpart V requirements.
NA = Not applicable.

Leak Date	Repair Date	Type of Report	Leak	3.a. Tag ID	3.b. Leak ID Method	3.c. Instr Reading	3.d. Initial Attempt	3.e. Final Attempt	3.f./g. WO or Other Docs/Notes	3.h. 2 Mos Prev Monitoring	3.i. 2 Wks Prev Visual Insps
9/28/07	-	Operator Turn Report	P-113B packing leaked	NS	NS	NS	NS	NS	NS	NS	NS
11/13/07	-	Oil and Tar Log	P-363B needs to be repacked	NS	NS	NS	NS	NS	NS	NS	NS
1/7/06	-	Operator Turn Report	P-113B leaking	NS	NS	NS	NS	NS	NS	NS	NS
1/29/06	-	Oil and Tar Log	P-304A has blown seal	NS	NS	NS	NS	NS	NS	NS	NS
3/26/06	3/26/06	Daily Check-off List	Blown gasket on P-309 line	10151/44580	Visual-daily turn inspection	NA, visual	Taken offline immediately on 3/26/06, repaired same day	3/26/06, monitor confirmation on 3/28/06, 65 ppm	No work order generated	3/28/06, 65 ppm 2/8/06, 2 ppm 1/7/05, 1680 ppm	Attached
8/30/06	-	Oil and Tar Log	Chloride pumps down; south's packing is leaking	NS	NS	NS	NS	NS	NS	NS	NS
10/31/06	11/03/06	Operator Turn Report	P-425B has blown seal	10012/44509	Visual-daily turn inspection	10/30/06, 10000 ppm (leak)	Taken offline immediately on 10/30/06, repaired 11/3/06	11/3/06, monitor confirmation on 11/27/06 (data file corrupt, ppm not available, less than 10000 ppm)	No work order generated	11/27/06 (data file corrupt, ppm not available, less than 10000 ppm) 10/30/06, 10000 ppm (leak) 9/27/06, 10 ppm 8/21/06, 6352 ppm	Attached

NS = this item or piece of equipment is not in benzene/VHAP service (less than 10%) and therefore not subject to Subpart V requirements.
NA = Not applicable.

Leak Date	Repair Date	Type of Report	Leak	3.a. Tag ID	3.b. Leak ID Method	3.c. Instr Reading	3.d. Initial Attempt	3.e. Final Attempt	3.f./g. WO or Other Docs/Notes	3.h. 2 Mos Prev Monitoring	3.i. 2 Wks Prev Visual Insps
1/11/05	-	Operator Turn Report	Leak under heat exchanger; P414B sparking from seal	NS	NS	NS	NS	NS	NS	NS	NS
6/1/05	-	Oil and Tar Log	P-415A caught on fire	NS	NS	NS	NS	NS	NS	NS	NS
4/26	-	Operator Turn Report	P-414A discharge valve leaking	NS	NS	NS	NS	NS	NS	NS	NS
4/27	-	Operator Turn Report	P-414A discharge valve leaking	NS	NS	NS	NS	NS	NS	NS	NS
5/7/02	-	Operator Turn Report	P-415B has bad seal	NS	NS	NS	NS	NS	NS	NS	NS
5/8/02	-	Operator Turn Report	P-415A is leaking from seal; P-415B back online	NS	NS	NS	NS	NS	NS	NS	NS
5/11/02	-	Operator Turn Report	P-415A is leaking oil	NS	NS	NS	NS	NS	NS	NS	NS
5/24/02	-	Operator Turn Report	P-415B blew a seal	NS	NS	NS	NS	NS	NS	NS	NS
5/27/02	-	Operator Turn Report	P-415A drained for maintenance	NS	NS	NS	NS	NS	NS	NS	NS
6/2/02	-	Operator Turn Report	P-415A ready if needed, but still needs maintenance	NS	NS	NS	NS	NS	NS	NS	NS
6/7/02	-	Operator Turn Report	P-415A changed today	NS	NS	NS	NS	NS	NS	NS	NS
7/21/02	-	Operator Turn Report	P-415A packing leaking	NS	NS	NS	NS	NS	NS	NS	NS
8/3/02	-	Operator Turn Report	P-415B leaking, P-415A is down	NS	NS	NS	NS	NS	NS	NS	NS

NS = this item or piece of equipment is not in benzene/VHAP service (less than 10%) and therefore not subject to Subpart V requirements.
NA = Not applicable.

EPA-R5-2012-0005960000356

EPA-USS-0330587

EPA-R5-2012-0005960000356

Leak Date	Repair Date	Type of Report	Leak	3.a. Tag ID	3.b. Leak ID Method	3.c. Instr Reading	3.d. Initial Attempt	3.e. Final Attempt	3.f./g. WO or Other Docs/Notes	3.h. 2 Mos Prev Monitoring	3.i. 2 Wks Prev Visual Insps
9/4/02	-	Operator Turn Report	P-9B blown seal; P-452A blown seal; P-405A blown seal removed; P-415A blown seal; P-363C blown seal	NS	NS	NS	NS	NS	NS	NS	NS
9/11/02	-	Operator Turn Report	P-9B pump pulled; P-363C bad seal; P-452A blown seal; P-405A pump pulled; P-415A bad seal	NS	NS	NS	NS	NS	NS	NS	NS
9/12/02	-	Operator Turn Report	P-405A, P-415A, P-9B, P-363C are down	NS	NS	NS	NS	NS	NS	NS	NS
8/28/02	-	Operator Turn Report	P-414B bad seal	NS	NS	NS	NS	NS	NS	NS	NS
10/14/02	-	Operator Turn Report	Repair of P-110A and leak at distillation	NS	NS	NS	NS	NS	NS	NS	NS
11/7/02	-	Operator Turn Report	P-415B down for maintenance	NS	NS	NS	NS	NS	NS	NS	NS
11/10/02	-	Operator Turn Report	Leak on E-452A	NS	NS	NS	NS	NS	NS	NS	NS
11/13/02	11/22/02	Operator Turn Report	P-414B blown seal	NS	NS	NS	NS	NS	NS	NS	NS

NS = this item or piece of equipment is not in benzene/VHAP service (less than 10%) and therefore not subject to Subpart V requirements.
NA = Not applicable.

EPA-USS-0330588

Leak Date	Repair Date	Type of Report	Leak	3.a. Tag ID	3.b. Leak ID Method	3.c. Instr Reading	3.d. Initial Attempt	3.e. Final Attempt	3.f./g. WO or Other Docs/Notes	3.h. 2 Mos Prev Monitoring	3.i. 2 Wks Prev Visual Insps
12/11/02	-	Operator Turn Report	P-452A down for maintenance repair	10000/44500	Down for regular maintenance, no leak cited	NA, no leak cited	NA, no leak cited	NA, no leak cited	NA, no leak cited	12/19/02, 0 ppm 11/25/02, 20 ppm 10/22/02, 200 ppm	No turn reports available, Apex Doc Mgmt system mandates destruction after 5 years retention
12/12/02	-	Operator Turn Report	Maintenance working on P-425A	10000/44500	Down for regular maintenance, no leak cited	NA, no leak cited	NA, no leak cited	NA, no leak cited	NA, no leak cited	12/19/02, 0 ppm 11/25/02, 20 ppm 10/22/02, 200 ppm	No turn reports available, Apex Doc Mgmt system mandates destruction after 5 years retention
2/25/03	-	Operator Turn Report	Maintenance changing P-113D	NS	NS	NS	NS	NS	NS	NS	NS
4/10/03	-	Operator Turn Report	P-425B down for maintenance	10012/44509	Down for regular maintenance, no leak cited	NA, no leak cited	NA, no leak cited	NA, no leak cited	NA, no leak cited	4/30/03, 5 ppm 3/28/03, 200 ppm 2/28/03, 50 ppm	Attached

NS = this item or piece of equipment is not in benzene/VHAP service (less than 10%) and therefore not subject to Subpart V requirements.
NA = Not applicable.

EPA-R5-2012-0005960000356

EPA-USS-0330589

Leak Date	Repair Date	Type of Report	Leak	3.a. Tag ID	3.b. Leak ID Method	3.c. Instr Reading	3.d. Initial Attempt	3.e. Final Attempt	3.f./g. WO or Other Docs/Notes	3.h. 2 Mos Prev Monitoring	3.i. 2 Wks Prev Visual Insps
4/23/03	-	Operator Turn Report	P-119A down for maintenance; 119A suction valve is broken	NS	NS	NS	NS	NS	NS	NS	NS
10/24/03	-	Operator Turn Report	P-415A down for maintenance	NS	NS	NS	NS	NS	NS	NS	NS
12/18/03	-	Operator Turn Report	Maintenance worked on P-414A, P-414B keeps kicking out	NS	NS	NS	NS	NS	NS	NS	NS

NS = this item or piece of equipment is not in benzene/VHAP service (less than 10%) and therefore not subject to Subpart V requirements.
NA = Not applicable.

UNITED STATES STEEL CORPORATION
RESPONSE TO EPA SECTION 114 REQUEST

ATTACHMENT A - INSPECTION REPORTS

PAGE 1

PLANT OPERATOR TURN REPORT COMMENTS Rev. 1-20-06 33140102.frm

Date 10-31-06 Turn 7-3

Operator Bob Nearly Manager B. MCDOWELL

1. Primary cooler change
2. Final cooler change
3. Stroked backflushed valves on #3 + #4, #9 + #10, #5 + 7 strainers.
4. Flushed dehydrator out with T-304B → T-9 S.C. → 10:00AM. 60 GPM
5. Draining water off #7 drain STOP
6. Set dehydrator back on, fed T-306C → P-452A → T-9.
7. Absorber man washed his pumps out.
8. Put P-100B-ON STEAM took P-100C OFF line (smoking) BAD
9. Pumping 5+7 → T-301 using push + pull pump.
10. Equalizing T-2 + T-3.
11. Above ground sump pump is plug + LINE? up (T-304A, B, C + 306C)
12. ETF is back on at N 00 N.
13. Switch P-425's put P-425A ON took P-425B OFF and valves are closed.

"P-425B - BLOW SEAL"

Trucks

T9 (time) 0

T363A 0 T363D 0 T311 0 T312 111 T331 0

Acid 0 Others B.F. = 0

SALT TRUCKS = 11

OVER

Location: Doc Management

PAGE 2

PLANT OPERATOR TURN REPORT COMMENTS Rev. 1-20-06 13140102.fm

Date 10-31-06 Turn 7-3

Operator Bob Hearly Manager B. MCDOWELL

14. Drained tar out P-100F and energy reset breaker at #5 sub.

15. Put P-100F ON line + idle down P-101B-steam,

☆ 16. NO cooler changes because of liquor problems with pumps P-100C + P-100F

17. at 1:20PM blow down SAMPLE in MAIL BOX (CALL LAB),

Trucks

T9 (time) _____

T363A _____ T363D _____ T311 _____ T312 _____ T331 _____

Acid _____ Others _____

Location: Doc Management

PLANT OPERATOR TURN REPORT COMMENTS Rev. 1-20-06 13140f02.frm

Date 10.31.06 Turn 3rd

Operator Smalka Manager Rex

- Dehydrator on - T306C, P452, at 40 g.p.m. to T9
- Draining Water - T304B, 7th
- Rodded out C Venturi
- Above sump is unplugged (oil + tar)
- Primary Cooler Change - Gen Rev. both sides 5 + 2 of
- Final Cooler Change - Rev. middle plate cooler
- Pumped east sump into pot
- 302 gear pump on at 7 p.m. 200 r.p.m.
- Picked up mats scarped tar + swept floor
- Washed up P105's + P109 A
- Stopped pumping 5 + 7N to T301 at 8 p.m.
- Flushing dehydrator with T304C to T9 at 10,

Trucks

T9 (time) _____

T363A _____ T363D _____ T311 _____ T312 _____ T331 _____

Acid / _____ Others _____

Location: Doc Management

PLANT OPERATOR TURN REPORT COMMENTS Rev. 1-20-06 13140102.fm

Date 10/31/06 Turn 10-6

Operator S. CLARK Manager D.D.

Cooler change (PRI) - #5-ON #6-OFF
" " - (FINAL) - Rev. Middle plate cooler - 2-X
Finished pumping oil into system
Washed-up all absorber pumps
Dehydrator on, T-306C → P452 → T-9 - (30-G.P.M.)
Backflushed - 3/4 - 9/10 - 5/7 - strainer Valves
Pumping 5/7 → T-301 - / pumping 102A → T-2 - Stopped
Pumped chloride drum empty - 2-X
Gravity fed T-301 into pri. cooler - .65% stopped, suction
started going up - 25.6 #4 - 25.4 #5
Mopped control-room floor,

Trucks

T9 (time) 0

T363A 2 T363D 0 T311 0 T312 1 T331 0

Acid 0 Others

Location: Doc Management

LIGHT OIL / TAR OPERATOR TURN REPORT

Date 10/31/06 Turn 7-3

Operator E. Moore Manager B. Mac

Unit	On	Ready	Down
(West) P9A	✓		
(East) P9B		✓	
P363A		✓	
P363B	✓		
P363C	✓		
P363D			✓
SP9A			✓
SP9B			✓
P204A	✓		
P204B		✓	
P204C			✓
P207B		✓	
P207C			✓
(West)P304A			✓
(East) P304B		✓	
SP304A		✓	
SP304B			✓
CENT SUMP E		✓	
P302A		✓	
P302B		✓	
P309A		✓	
LO DOCK SUMP A		✓	
T-311 Sump		✓	
T-312 Sump			✓
T 331 Sump		✓	
Phenol Pump		✓	

Unit	On	Ready	Down
P400C	✓		
P400D		✓	
P452A	✓		
P452B		✓	
CHLORIDE N			✓
CHLORIDE S		✓	
P405A	✓		
P405B			✓
P414A	✓		
P414B		✓	
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A	✓		
P418B			✓
P425A	✓		
P425B			✓
P-453A		✓	
P-453B		✓	
P-162A		✓	
P-162B			✓
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			✓
SM. DIST SUMP S			✓

COG Dial

	East	W
Start	7:38	7:1
Stop	7:42	7:1
Start	11:06	11:3
Stop	11:10	11:3
Start		
Stop		
Start		
Stop		

Required 3 times per shift thru Sept., 4 times per shif thru March.

DN- means in service
READY means can be put in ser
DOWN- means cannot be put in s

Comments: Switched p-425B to p-425A (P-425B seal is down) down for mtce.

Location: Doc Management
Issued: 8/22/02
Revised: 4/10/06

13140103TRM

LIGHT OIL / TAR OPERATOR TURN REPORT

Date 10-31-06 Turn 11-7

Operator TC Manager DD

Unit	On	Ready	Down
(West) P9A	✓		
(East) P9B		✓	
P363A		✓	
P363B	✓		
P363C	✓		
P363D			✓
SP9A			✓
SP9B			✓
P204A			
P204B			
P204C			
P207B		✓	
P207C			✓
(West)P304A			✓
(East) P304B		✓	
SP304A		✓	
SP304B		✓	
...ION SUMP E		✓	
P302A		✓	
P302B		✓	
P309A		✓	
LD DOCK SUMP A		✓	
T-311 Sump		✓	
T-312 Sump		✓	
T 331 Sump		✓	
Phenol Pump		✓	

Unit	On	Ready	Down
P400C	✓		
P400D		✓	
P452A	✓		
P452B		✓	
CHLORIDE N			✓
CHLORIDE S		✓	
P405A	✓		
P405B			✓
P414A	✓		
P414B		✓	
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A	✓		
P418B			✓
P425A		✓	
P425B	✓		
P-453A		✓	
P-453B		✓	
P-162A		✓	
P-162B			✓
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			✓
SM. DIST SUMP S			✓

COG Drain

	East	V
Start	11:06	11:2
Stop	11:07	11:3
Start	1:36	1:3
Stop	1:37	1:31
Start	4:06	4:
Stop	4:07	4:0
Start		
Stop		

Required 3 times per shift , thru Sept., 4 times per shift thru March.

ON means in service
READY means can be put in ser
DOWN- means cannot be put in s

Comments:

Location: Doc Management
Issued: 8/22/02
Revised: 4/10/06

13140103FRM

LIGHT OIL / TAR OPERATOR TURN REPORT

Date 10/30/06 Turn 3-11

Operator E. Moore Manager Rex G.

Unit	On	Ready	Down
(West) P9A	✓		
(East) P9B		✓	
P363A		✓	
P363B	✓		
P363C	✓		
P363D			✓
SP9A			✓
SP9B			✓
P204A	✓		
P204B	✓	✓	
P204C			✓
P207B		✓	
P207C			✓
(West)P304A			✓
(East) P304B		✓	
SP304A		✓	
SP304B		✓	
CENT SUMP E	✓	✓	
P302A		✓	
P302B		✓	
P309A		✓	
LO DOCK SUMP A		✓	
T-311 Sump		✓	
T-312 Sump			✓
T 331 Sump		✓	
Phenol Pump		✓	

Unit	On	Ready	Down
P400C	✓		
P400D		✓	
P452A	✓		
P452B		✓	
CHLORIDE N			✓
CHLORIDE S	✓	✓	
P405A	✓		
P405B			✓
P414A	✓		
P414B		✓	
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A	✓		
P418B			✓
P425A		✓	
P425B	✓		
P-453A		✓	
P 453B		✓	
P-162A		✓	
P-162B			✓
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			✓
SM. DIST SUMP S			✓

COG Drai

	East	V
Start	3:44	3:0
Stop	3:48	3:1
Start	6:13	6:5
Stop	6:16	6:5
Start	8:32	8:0
Stop	8:34	8:0
Start		
Stop		

Required 3 times per shift thru Sept., 4 times per shif thru March.

ON- means in service
READY- means can be put in ser
DOWN- means cannot be put in s

Comments:

Location: Doc Management
Issued: 8/22/02
Revised: 4/10/06

1314D103FRM

LIGHT OIL / TAR OPERATOR TURN REPORT

Date 10-30-06 Turn 11-7

Operator MB Manager Brian

Unit	On	Ready	Down
(West) P9A	✓		
(East) P9B		✓	
P363A		✓	
P363B	✓		
P363C	✓		
P363D			✓
SP9A			✓
SP9B			✓
P204A	✓		
P204B		✓	
P204C			✓
P207B		✓	
P207C			✓
(West)P304A			✓
(East) P304B		✓	
SP304A		✓	
SP304B		✓	
CENT SUMP E		✓	
P302A		✓	
P302B		✓	
P309A		✓	
LO DOCK SUMP A		✓	
T-311 Sump		✓	
T-312 Sump		✓	
T-331 Sump		✓	
Phenol Pump		✓	

Unit	On	Ready	Down
P400C	✓		
P400D		✓	
P452A	✓		
P452B		✓	
CHLORIDE N			✓
CHLORIDE S		✓	
P405A	✓		
P406B			✓
P414A	✓		
P414B		✓	
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A	✓		
P418B			✓
P425A		✓	
P425B	✓		
P-453A		✓	
P 453B		✓	
P-162A		✓	
P 162B			✓
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			✓
SM. DIST SUMP S			✓

COG Draf

	Fast	V
Start	10 37	10 0
Stop	10 8 P	10 0
Start	116	180
Stop	117	182
Start	5 10	4 3
Stop	5 12	4 4
Start		
Stop		

Required 3 times per shift thru Sept., 4 times per shif thru March.

ON- means in service
READY- means can be put in ser
DOWN- means cannot be put in s

Comments:

Location: Doc Management
Issued:8/22/02
Revised: 4/10/06

13140103FRM

LIGHT OIL / TAR OPERATOR TURN REPORT

Date 10/29/06 Turn 3-11

Operator E. Moore Manager Rex G.

Unit	On	Ready	Down
(West) P9A	✓		
(East) P9B		✓	
P363A		✓	
P363B	✓		
P363C	✓		
P363D			✓
SP9A			✓
SP9B			✓
P204A	✓		
P204B		✓	
P204C			✓
P207B		✓	
P207C			✓
(West)P304A			✓
(East) P304B		✓	
SP304A		✓	
SP304B		✓	
[illegible] SUMP E	✓	✓	
P302A		✓	
P302B		✓	
P309A		✓	
LO DOCK SUMP A		✓	
T-311 Sump		✓	
T-312 Sump			✓
T 331 Sump		✓	
Phenol Pump		✓	

Unit	On	Ready	Down
P400C	✓		
P400D		✓	
P452A	✓		
P452B		✓	
CHLORIDE N			✓
CHLORIDE S	✓	✓	
P405A	✓		
P405B			✓
P414A	✓		
P414B		✓	
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A	✓		
P418B			✓
P425A		✓	
P425B	✓		
P-453A		✓	
P-453B		✓	
P-162A		✓	
P-162B			✓
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			✓
SM. DIST SUMP S			✓

COG Drai

	East	V
Start	3:53	3:1
Stop	3:59	3:2
Start	6:30	6:5
Stop	6:34	6:5
Start	8:26	9:0
Stop	8:30	8:0
Start		
Stop		

Required 3 times per shift, thru Sept., 4 times per shif thru March.

ON- means in service
READY- means can be put in ser
DOWN- means cannot be put in s

Comments:

Location: Doc Management
Issued:8/22/02
Revised: 4/10/06

13140103FRM

LIGHT OIL / TAR OPERATOR TURN REPORT

Date 10-29-06 Turn 7-3

Operator [illegible] Manager [illegible]

Unit	On	Ready	Down
(West) P8A	✓		
(East) P8B		✓	
P363A		✓	
P363B	✓		
P363C	✓		
P363D			✓
SP9A			✓
SP9B			✓
P204A	✓	✓	
P204B	✓	✓	
P204C			✓
P207B		✓	
P207C			✓
(West)P304A			✓
(East) P304B		✓	
SP304A		✓	
SP304B		✓	
CENT SUMP F		✓	
P302A		✓	
P307B		✓	
P309A		✓	
LO DOCK SUMP A		✓	
T-311 Sump		✓	
T 312 Sump		✓	
T-331 Sump		✓	
Phenol Pump		✓	

Unit	On	Ready	Down
P400C	✓		
P400D		✓	
P452A	✓		
P452B		✓	
CHLORIDE N		✓	
CHLORIDE S		✓	
P405A	✓		
P405B		✓	
P414A	✓		
P414B		✓	
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A	✓		
P418B			✓
P425A		✓	
P425B	✓		
P-453A		✓	
P-453B		✓	
P-162A		✓	
P-162B			✓
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			✓
SM. DIST SUMP S			✓

COG Drai

	East	W
Start	7:08	7:
Stop	7:11	7:
Start	10:00	10:
Stop	10:13	10:
Start	1:23	1:
Stop	1:26	1:
Start		
Stop		

Required 3 times per shift thru Sept., 4 times per shif thru March.

ON- means in service
READY- means can be put in ser
DOWN- means cannot be put in s

Comments:

Location: Doc Management
Issued:8/22/02
Revised: 4/10/06

13140103FRM

LIGHT OIL / TAR OPERATOR TURN REPORT

Date 10-29-06 Turn 1/-2

Operator MB Manager BKM

Unit	On	Ready	Down
(West) P9A	✓		
(East) P9B		✓	
P363A		✓	
P363B	✓		
P363C	✓		
P363D			✓
SP9A			✓
SP9B			✓
P204A	✓		
P204B		✓	
P204C			✓
P207B		✓	
P207C			✓
(West)P304A			✓
(East) P304B		✓	
SP304A		✓	
SP304B		✓	
...CN SUMP E		✓	
P302A		✓	
P302B		✓	
P309A		✓	
D DOCK SUMP A		✓	
T-311 Sump		✓	
T-312 Sump			✓
T 331 Sump		✓	
Phenol Pump		✓	

Unit	On	Ready	Down
P400C	✓		
P400D		✓	
P452A	✓		
P452B		✓	
CHLORIDE N		✓	
CHLORIDE S		✓	
P405A	✓		
P405B			✓
P414A	✓		
P414B		✓	
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A	✓		
P418B			✓
P425A		✓	
P425B	✓		
P-453A		✓	
P-453B		✓	
P-162A		✓	
P-162B			✓
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			✓
SM. DIST SUMP S			✓

	COG Dial Fast	V
Start	11 20	10 5.
Stop	11 22	10 55
Start	1 37	1 57
Stop	1 39	2 05
Start	5 40	5 7
Stop	5 42	5 72
Start		
Stop		

Required 3 times per shift, thru Sept., 4 times per shif thru March.

ON- means in service
READY- means can be put in ser
DOWN- means cannot be put in s

Comments:

Location: Doc Management
Issued: 8/22/07
Revised: 4/10/06

13140103FRM

LIGHT OIL / TAR OPERATOR TURN REPORT

Date 10/28/06 Turn 7-3 & 3-11

Operator E. Moore Manager D. Dabbs

Unit	On	Ready	Down
(West) P9A	✓		
(East) P9B		✓	
P363A		✓	
P363B	✓		
P363C	✓		
P363D			✓
SP9A			✓
SP9B			✓
P204A	✓		
P204B		✓	
P204C			✓
P207B		✓	
P207C			✓
(West)P304A			✓
(East) P304B		✓	
SP304A		✓	
SP304B		✓	
CENT SUMP E		✓	
P302A		✓	
P302B		✓	
P305A		✓	
TO DOCK SUMP A		✓	
T 311 Sump		✓	
T-312 Sump			✓
T-331 Sump		✓	
Phenol Pump		✓	

Unit	On	Ready	Down
P400C	✓		
P400D		✓	
P452A	✓		
P452B		✓	
CHLORIDE N			✓
CHLORIDE S		✓	
P405A	✓		
P405B			✓
P414A	✓		
P414B		✓	
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A	✓		
P418B			✓
P425A		✓	
P425B	✓		
P-453A		✓	
P. 453B		✓	
P-162A		✓	
P- 162B			✓
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			
SM. DIST SUMP S			

COG Drai

	Fast	W
Start	7:43	9:[illegible]
Stop	7:48	8:[illegible]
Start	10:29	10:[illegible]
Stop	10:31	10:[illegible]
Start	1:03	1:[illegible]
Stop	1:05	1:[illegible]
Start		
Stop		

Required 3 times per shift thru Sept., 4 times per shif thru March.

ON- means in service
READY- means can be put in ser
DOWN- means cannot be put in s

Comments:

Location: Doc Management
Issued: 6/22/02
Revised: 4/10/06

13140103FRM

LIGHT OIL / TAR OPERATION TURN REPORT

Date 10-28-06 Turn 11-7

Operator MB Manager Rex G

Unit	On	Ready	Down
(West) P9A	✓		
(East) P9B		✓	
P363A		✓	
P363B	✓		
P363C	✓		
P363D			✓
SP9A			✓
SP9B			✓
P204A	✓		
P204B		✓	
P204C			✓
P207B		✓	
P207C			✓
(West)P304A			✓
(East) P304B		✓	
SP304A		✓	
SP304B		✓	
CENT SUMP E		✓	
P302A		✓	
P302B		✓	
P309A		✓	
LO DOCK SUMP A		✓	
T 311 Sump		✓	
T-312 Sump		✓	
T-331 Sump		✓	
Phenol Pump		✓	

Unit	On	Ready	Down
P400C	✓		
P400D		✓	
P452A	✓		
P452B		✓	
CHLORIDE N		✓	
CHLORIDE S		✓	
P405A	✓		
P405B		✓	
P414A	✓		
P414B		✓	
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A	✓		
P418B			✓
P425A		✓	
P425B	✓		
P-453A		✓	
P-453B	✓		
P-162A		✓	
P-162B		✓	
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			✓
SM. DIST SUMP S			✓

COG Drat

	Fast	
Start	10 37	10
Stop	10 39	10
Start	2 22	1 5
Stop	2 24	1 5
Start	5 38	5
Stop	5 40	5
Start		
Stop		

Required 3 times per shift thru Sept., 4 times per shift thru March.

ON- means in service
READY- means can be put in ser
DOWN means cannot be put in s

Comments:

Location: Doc Management
Issued: 6/22/02
Revised: 4/10/06

13140103FRM

LIGHT OIL / TAR OPERATOR TURN REPORT

Date 10-27-06 Turn 3-11

Operator RHall II Manager Brian O.

Unit	On	Ready	Down
(West) P9A	✓		
(East) P9B		✓	
P363A		✓	
P363B	✓		
P363C	✓		
P363D			✓
SP9A			✓
SP9B			✓
P204A	✓		
P204B		✓	
P204C			✓
P207B		✓	
P207C			✓
(West)P304A			✓
(East) P304B		✓	
SP304A		✓	
SP304B		✓	
CENT SUMP E		✓	
P302A		✓	
P302B		✓	
P309A		✓	
TD DOCK SUMP A		✓	
T-311 Sump		✓	
T-312 Sump		✓	
T-331 Sump		✓	
Phenol Pump		✓	

Unit	On	Ready	Down
P400C	✓		
P400D		✓	
P452A	✓		
P452B		✓	
CHLORIDE N		✓	
CHLORIDE S		✓	
P405A	✓		
P405B		✓	
P414A	✓		
P414B		✓	
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A	✓		
P418B			✓
P425A		✓	
P425B	✓		
P-453A		✓	
P-453B	✓		
P-162A		✓	
P-162B		✓	
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			✓
SM. DIST SUMP S			✓

	COG Drain East	V
Start	4:45	4:5
Stop	4:48	4:5
Start	6:20	6:
Stop	6:23	6:
Start		
Stop		
Start		
Stop		

Required 3 times per shift, thru Sept., 4 times per shift thru March.

ON- means in service
READY- means can be put in ser
DOWN- means cannot be put in s

Comments:

Location: Doc Management
Issued: 8/22/02
Revised: 4/10/06

13140103FRM

LIGHT OIL / TAR OPERATOR TURN REPORT

Date 10-27-06 Turn 7-3

Operator MB / RH Manager Leo M

Unit	On	Ready	Down
(West) P9A	✓		
(East) P9B		✓	
P363A		✓	
P363B	✓		
P363C	✓		
P363D			✓
SP9A			✓
SP9B			✓
P204A	✓		
P204B		✓	
P204C			✓
P207B		✓	
P207C			✓
(West)P304A			✓
(East) P304B		✓	
SP304A		✓	
SP304B		✓	
VENT SUMP E		✓	
P302A		✓	
P302B		✓	
P309A		✓	
TO DOCK SUMP A		✓	
T-311 Sump		✓	
T-312 Sump		✓	
T-331 Sump		✓	
Phenol Pump		✓	

Unit	On	Ready	Down
P400C	✓		
P400D		✓	
P452A	✓		
P452B		✓	
CHLORIDE N		✓	
CHLORIDE S		✓	
P405A	✓		
P405B		✓	
P414A	✓		
P414B		✓	
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A	✓		
P418B			✓
P425A		✓	
P425B	✓		
P-453A		✓	
P-453B	✓		
P-162A		✓	
P-162B		✓	
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			✓
SM. DIST SUMP S			✓

	COG Drain East	W
Start	6:10	5:3
Stop	6:13	5:3
Start	10:20	10:
Stop	10:24	10:
Start	12:30	12:
Stop	12:33	12:
Start		
Stop		

Required 3 times per shift A thru Sept., 4 times per shift thru March.

ON- means in service
READY means can be put in serv
DOWN- means cannot be put in se

Comments:

Location: Ops Management
Issued:3/22/02
Revised: 4/10/06

13140103FRM

LIGHT OIL / TAR OPERATOR TURN REPORT

Date 10-27-06 Turn 11-7

Operator MB Manager Kyle V.

Unit	On	Ready	Down
(West) P9A	✓		
(East) P9B		✓	
P363A		✓	
P363B	✓		
P363C	✓		
P363D			✓
SP9A			✓
SP9B			✓
P204A	✓		
P204B		✓	
P204C			✓
P207B		✓	
P207C			✓
(West)P304A			✓
(East) P304B		✓	
SP304A		✓	
SP304B		✓	
CONT SUMP E		✓	
P302A		✓	
P302B		✓	
P309A		✓	
LO DOCK SUMP A		✓	
T 311 Sump		✓	
T-312 Sump		✓	
T-331 Sump		✓	
Phenol Pump		✓	

Unit	On	Ready	Down
P400C	✓		
P400D		✓	
P452A	✓		
P452B		✓	
CHLORIDE N		✓	
CHLORIDE S		✓	
P405A	✓		
P405B		✓	
P414A	✓		
P414B		✓	
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A	✓		
P418B			✓
P425A		✓	
P425B	✓		
P-453A		✓	
P-453B	✓		
P-162A		✓	
P-162B		✓	
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			✓
SM. DIST SUMP S			✓

	CDG Drain East	CDG Drain W
Start	1105	10 30
Stop	1107	10 32
Start	[illegible]	[illegible]
Stop	[illegible]	[illegible]
Start	2 55	2 06
Stop	2 57	2 08
Start	5 47	5 10
Stop	5 49	5 13

Required 3 times per shift A thru Sept., 4 times per shift thru March.

ON- means in service
READY- means can be put in serv
DOWN- means cannot be put in se

Comments:

Location: Doc Management
Issued 8/22/02
Revised: 4/10/08

13140103FRM

LIGHT OIL / TAR OPERATOR TURN REPORT

Date 10-26-06 Turn 3-11

Operator [illegible] Manager D Dagos

Unit	On	Ready	Down
(West) P9A	✓		
(East) P9B		✓	
P363A		✓	
P363B	✓		
P363C	✓		
P363D			✓
SP9A			✓
SP9B			✓
P204A	✓		
P204B		✓	
P204C			✓
P207B		✓	
P207C			✓
(West)P304A			✓
(East) P304B		✓	
SP304A		✓	
SP304B		✓	
CENT SUMP F		✓	
P302A		✓	
P302B		✓	
P309A		✓	
LO DOCK SUMP A		✓	
T-311 Sump		✓	
T-312 Sump		✓	
T-331 Sump		✓	
Phenol Pump		✓	

Unit	On	Ready	Down
P400C	✓		
P400D		✓	
P452A	✓		
P452B		✓	
CHLORIDE N		✓	
CHLORIDE S		✓	
P405A	✓		
P405B		✓	
P414A	✓		
P414B		✓	
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A	✓		
P418B			✓
P425A		✓	
P425B	✓		
P-453A		✓	
P-453B	✓		
P-162A		✓	
P-162B		✓	
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			✓
SM. DIST SUMP S			✓

COG Drain

	Fast	W
Start	5:30	5:3
Stop	5:33	5:3
Start		
Stop		
Start		
Stop		
Start		
Stop		

Required 3 times per shift A thru Sept., 4 times per shift thru March.

DN- means in service
READY- means can be put in serv
DOWN- means cannot be put in se

Comments:

Location: Doc Management
Issued: 8/22/02
Revised: 4/10/06

13140103FRM

LIGHT OIL / TAR OPERATOR TURN REPORT

Date 10-26-06 Turn 7-3

Operator [illegible] Manager [illegible]

Unit	Op.	Ready	Down
(West) P9A	✓		
(East) P9B		✓	
P363A	✓	✓	
P363B	✓		
P363C	✓		
P363D			✓
SP9A			✓
SP9B			✓
P204A	✓		
P204B		✓	
P204C			✓
P207B		✓	
P207C			✓
(West) P304A			✓
(East) P304B		✓	
SP304A		✓	
SP304B		✓	
CENT SUMP E		✓	
P302A		✓	
P302B		✓	
P309A		✓	
LD DOCK SUMP A		✓	
T-311 Sump		✓	
T 312 Sump		✓	
T-331 Sump		✓	
Phenol Pump		✓	

Unit	Op.	Ready	Down
P400C	✓		
P400D		✓	
P452A	✓		
P452B		✓	
CHLORIDE N		✓	
CHLORIDE S		✓	
P405A	✓		
P405B		✓	
P414A	✓		
P414B		✓	
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A	✓		
P418B			✓
P425A	✓		
P425B		✓	
P-453A		✓	
P-453B	✓		
P-162A		✓	
P-162B		✓	
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			✓
SM. DIST SUMP S			✓

COG Drain	East	W
Start		
Stop		
Start		
Stop		
Start		
Stop		
Start		
Stop		

Required 3 times per shift A thru Sept., 4 times per shift thru March.

ON means in service
READY means can be put in serv
DOWN- means cannot be put in s

Comments: _____

Location: Doc Management
Issued: 8/22/02
Revised: 4/10/06

13140103FRM

LIGHT OIL / TAR OPERATOR TURN REPORT

Date 11-26-06 Turn 11-7

Operator MB Manager Kyle. V.

Unit	On	Ready	Down
(West) P9A	✓		
(East) P9B		✓	
P363A		✓	
P363B	✓		
P363C	✓		
P363D			✓
SP9A			✓
SP9B			✓
P204A	✓		
P204B		✓	
P204C			✓
P207B		✓	
P207C			✓
(West)P304A			✓
(East) P304B		✓	
SP304A		✓	
SP304B		✓	
LCN SUMP F		✓	
P302A		✓	
P302B		✓	
P309A		✓	
LD DOCK SUMP A		✓	
T 311 Sump		✓	
T-312 Sump		✓	
T-331 Sump		✓	
Phenol Pump			

Unit	On	Ready	Down
P400C	✓		
P400D		✓	
P452A	✓		
P452B		✓	
CHLORIDE N		✓	
CHLORIDE S		✓	
P405A	✓		
P405B			✓
P414A	✓		
P414B		✓	
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A	✓		
P418B			✓
P425A		✓	
P425B	✓		
P-453A		✓	
P-453B	✓		
P-162A		✓	
P-162B		✓	
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			✓
SM. DIST SUMP S			✓

COG Drain

	East	W
Start	10:37	10:3
Stop	10:33	10:3
Start	2:37	2:03
Stop	2:37	2:01
Start	6:05	5:49
Stop	6:00	5:46
Start		
Stop		

Required 3 times per shift thru Sept., 4 times per shift thru March.

ON- means in service
READY- means can be put in serv
DOWN- means cannot be put in se

Comments:

Location: Doc Management
Issued: 8/22/02
Revised: 4/10/06

13140103FRM

LIGHT OIL / TAR OPERATOR TURN REPORT

Date 10-25-06 Turn 3-11

Operator [illegible] Manager Brian [illegible]

Unit	On	Ready	Down
(West) P9A	✓		
(East) P9B		✓	
P363A		✓	
P363B	✓		
P363C	✓		
P363D			✓
SP9A			✓
SP9B			✓
P204A	✓	✓	
P204B		✓	
P204C			✓
P207B		✓	
P207C			✓
(West)P304A	✓		✓
(East) P304B		✓	
SP304A		✓	
SP304B		✓	
CENT SUMP C		✓	
P302A		✓	
P302B		✓	
P309A		✓	
LD DOCK SUMP A		✓	
T-311 Sump		✓	
T-312 Sump		✓	
T-331 Sump		✓	
Phenol Pump		✓	

Unit	On	Ready	Down
P400C	✓		
P400D		✓	
P452A	✓		
P452B		✓	
CHLORIDE N		✓	
CHLORIDE S		✓	
P405A	✓		
P405B			✓
P414A	✓		
P414B		✓	
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A	✓		
P418B			✓
P425A		✓	
P425B	✓		
P-453A		✓	
P-453B		✓	
P-162A		✓	
P-162B			✓
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			✓
SM. DIST SUMP S			✓

COG Drai

	Fast	
Start	3:15	3
Stop	3:30	3:5
Start	5:40	5:
Stop	5:57	5:5
Start		
Stop		
Start		
Stop		

Required 3 times per shift thru Sept , 4 times per shit thru March.

ON means in service
READY- means can be put in ser
DOWN- means cannot be put in s

Comments:

Location: Doc Management
Issued: 8/22/02
Revised: 4/10/06

131401031RM

LIGHT OIL / TAR OPERATOR TURN REPORT

Date 10-25-06 Turn 11-7

Operator TC Manager DD

Unit	On	Ready	Down
(West) P9A	✓		
(East) P9B		✓	
P363A		✓	
P363B	✓		
P363C	✓		
P363D			✓
SP9A			✓
SP9B			✓
P204A	✓		
P204B	✓	✓	
P204C			✓
P207B		✓	
P207C		✓	
(West) P304A			✓
(East) P304B		✓	
SP304A		✓	
SP304B		✓	
CENT SUMP F		✓	
P302A		✓	
P302B		✓	
P309A		✓	
LD DOCK SUMP A		✓	
T-311 Sump		✓	
T-312 Sump		✓	
T 331 Sump		✓	
Phenol Pump		✓	

Unit	On	Ready	Down
P400C	✓		
P400D		✓	
P452A	✓		
P452B		✓	
CHLORIDE N		✓	
CHLORIDE S		✓	
P405A	✓		
P405B			✓
P414A	✓		
P414B		✓	
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A	✓		
P418B			✓
P425A		✓	
P425B	✓		
P-453A		✓	
P-453B		✓	
P-162A		✓	
P-162B			✓
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			✓
SM. DIST SUMP S			✓

	COG Drain East	V
Start	11:15	11:[illegible]
Stop	11:27	11:[illegible]
Start	6:20	6:[illegible]
Stop	6:38	6:[illegible]
Start	12:45	12:[illegible]
Stop	1:00	12:[illegible]
Start		
Stop		

Required 3 times per shift / thru Sept., 4 times per shift thru March.

ON- means in service
READY- means can be put in serv
DOWN means cannot be put in s

Comments:

Location: Doc Management
Issued: 8/22/02
Revised: 4/10/06

13140103FRM

LIGHT OIL / TAR OPERATOR TURN REPORT

Date 10-24-06 Turn 3-11

Operator [illegible] Manager [illegible]

Unit	On	Ready	Down
(West) P3A	✓	✓	
(East) P3B		✓	
P363A		✓	
P363B	✓		
P363C	✓		
P363D			✓
SP9A			✓
SP9B			✓
P204A	✓		
P204B		✓	
P204C			✓
P207B		✓	
P207C			✓
(West)P304A			✓
(East) P304B		✓	
SP304A		✓	
SP304B		✓	
CENT SUMP E		✓	
P302A		✓	
P302B		✓	
P309A		✓	
TO DOCK SUMP A		✓	
T-311 Sump		✓	
T-312 Sump		✓	
T-331 Sump		✓	
Phenol Pump		✓	

Unit	On	Ready	Down
P400C	✓		
P400D		✓	
P452A	✓		
P452B		✓	
CHLORIDE N		✓	
CHLORIDE S		✓	
P405A			✓
P405B	✓		
P414A	✓		
P414B		✓	
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A	✓		
P418B			✓
P425A		✓	
P425B	✓		
P-453A		✓	
P-453B		✓	
P-162A		✓	
P-162B			✓
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			✓
SM. DIST SUMP S			✓

COG Drat

	East	W
Start	3:27	3:1
Stop	3:33	3:[illegible]
Start	6:35	6:[illegible]
Stop	6:40	6:[illegible]
Start	9:15	9:[illegible]
Stop	9:19	9:[illegible]
Start		
Stop		

Required 3 times per shift, thru Sept., 4 times per shift thru March.

IN- means in service
READY- means can be put in ser
DOWN- means cannot be put in s

Comments: _____

Location: Doc Management
Issued: 3/22/02
Revised: 4/20/06

13140103FRM

LIGHT OIL / TAR OPERATOR TURN REPORT

Date 10-24-06 Turn 7-3

Operator TC Manager DD

Unit	On	Ready	Down
(West) P8A	✓		
(East) P9B		✓	
P363A		✓	
P363B	✓		
P363C	✓		
P363D			✓
SP9A			✓
SP9B			✓
P204A	✓		
P204B		✓	
P204C			✓
P207B		✓	
P207C		✓	
(West)P304A			✓
(East) P304B		✓	
SP304A		✓	
SP304B			
CENT SUMP E		✓	
P302A		✓	
P302B		✓	
P309A		✓	
TO DOCK SUMP A		✓	
T-311 Sump		✓	
T-312 Sump		✓	
T-331 Sump		✓	
Phenol Pump		✓	

Unit	On	Ready	Down
P400C	✓		
P400D		✓	
P452A	✓		
P452B		✓	
CHLORIDE N		✓	
CHLORIDE S		✓	
P405A			✓ for maint
P405B			✓
P414A	✓		
P414B		✓	
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A	✓		
P418B			✓
P425A		✓	
P425B	✓		
P 453A		✓	
P-453B		✓	
P-162A		✓	
P-162B			✓
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			✓
SM. DIST SUMP S			✓

COG Drai

	East	
Start	8:10	8:0
Stop	8:17	8:0
Start	10:08	10:
Stop	10:11	10:
Start	12:05	12:
Stop	12:08	12:
Start		
Stop		

Required 3 times per shift thru Sept., 4 times per shif thru March.

ON- means in service
READY- means can be put in ser
DOWN- means cannot be put in s

Comments: Steam Leak behind the East Gas Mains !!!

Location: Dor Management
Issued: 8/23/02
Revised: 4/10/06

13140103FRM

LIGHT OIL / TAR OPERATOR TURN REPORT

Date 10-23-06 Turn 7-3

Operator MB Manager C. Jones

Unit	On	Ready	Down
(West) P9A	✓		
(East) P9B		✓	
P363A		✓	
P363B	✓		
P363C	✓		
P363D			✓
SP9A			✓
SP9B			✓
P204A	✓		
P204B		✓	
P204C			✓
P207B		✓	
P207C			✓
(West) P304A			✓
(East) P304B		✓	
SP304A		✓	
SP304B		✓	
LIGHT SUMP E		✓	
P302A		✓	
P302B		✓	
P309A		✓	
LO DOCK SUMP A		✓	
T-311 Sump		✓	
T-312 Sump		✓	
T 331 Sump		✓	
Phenol Pump		✓	

Unit	On	Ready	Down
P400C	✓		
P400D		✓	
P452A		✓	
P452B		✓	
CHLORIDE N		✓	
CHLORIDE S		✓	
P405A			✓
P405B	✓		
P414A	✓		
P414B		✓	
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A	✓		
P418B			✓
P425A		✓	
P425B	✓		
P-453A		✓	
P-453B		✓	
P-162A		✓	
P-162B			✓
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			✓
SM. DIST SUMP S			✓

COG Draf

	East	W
Start	631	6[illegible]
Stop	633	[illegible]
Start	957	10[illegible]
Stop	959	10[illegible]
Start	149	12[illegible]
Stop	149	122
Start		
Stop		

Required 3 times per shift . thru Sept., 4 times per shif thru March.

ON- means in service
READY- means can be put in ser
DOWN means cannot be put in s

Comments:

Location: Dnr Management
Issued 8/22/02
Revised: 4/10/05

13140103FRM

LIGHT OIL / TAR OPERATOR TURN REPORT

Date 10-23-06 Turn 11-7

Operator MB Manager Kyle V.

Unit	On	Ready	Down
(West) P9A	✓		
(East) P9B		✓	
P363A		✓	
P363B	✓		
P363C	✓		
P363D			✓
SP9A			✓
SP9B			✓
P204A	✓		
P204B		✓	
P204C			✓
P207B		✓	
P207C			✓
(West)P304A			✓
(East) P304B		✓	
SP304A		✓	
SP304B		✓	
CENT SUMP E		✓	
P302A		✓	
P302B		✓	
P309A		✓	
T6 DOCK SUMP A		✓	
T-311 Sump		✓	
T-312 Sump		✓	
T 331 Sump		✓	
Phenol Pump		✓	

Unit	On	Ready	Down
P400C	✓		
P400D		✓	
P452A		✓	
P452B		✓	
CHLORIDE N		✓	
CHLORIDE S		✓	
P405A			✓
P405B	✓		
P414A	✓		
P414B		✓	
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A	✓		
P418B			✓
P425A		✓	
P425B	✓		
P-453A		✓	
P-453B		✓	
P-162A		✓	
P-162B			✓
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			✓
SM. DIST SUMP S			✓

COG Drain

	East	V
Start	10 25	10 0
Stop	10 27	10 0
Start	1 47	2 15
Stop	1 49	2 18
Start	5 38	5 0
Stop	5 40	5 11
Start		
Stop		

Required 3 times per shift thru Sept., 4 times per shift thru March.

ON- means in service
READY- means can be put in ser
DOWN- means cannot be put in s

Comments:

Location: Doc Management
Issued: 8/22/02
Revised: 4/10/06

13140103FRM

LIGHT OIL / TAR OPERATOR TURN REPORT

Date 10-22-07 Turn 3-11

Operator TC Manager DD

Unit	On	Ready	Down
(West) P9A	✓		
(East) P9B		✓	
P363A		✓	
P363B	✓		
P363C	✓		
P363D			✓
SP9A			✓
SP9B			✓
P204A		✓	
P204B	✓	✓	
P204C			✓
P207B		✓	
P207C			✓
(West)P304A			✓
(East) P304B		✓	
SP304A		✓	
SP304B		✓	
GENS SUMP C		✓	
P302A		✓	
P302B		✓	
P309A		✓	
TO DOCK SUMP A		✓	
T-311 Sump		✓	
T-312 Sump		✓	
T-331 Sump		✓	
Phenol Pump		✓	

Unit	On	Ready	Down
P400C	✓		
P400D		✓	
P452A		✓	
P452B		✓	
CHLORIDE N		✓	
CHLORIDE S		✓	✓ Plugged Open
P405A			✓
P405B	✓		
P414A	✓		
P414B		✓	
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A	✓		
P418B			✓
P425A		✓	
P425B	✓		
P-453A		✓	
P-453B		✓	
P-162A		✓	
P-162B			✓
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			✓
SM. DIST SUMP S			✓

	COG Drai East	
Start	8:45	8:3
Stop	9:00	8:
Start		
Stop		
Start		
Stop		
Start		
Stop		

Required 3 times per shift thru Sept., 4 times per shif thru March.

ON- means in service
READY- means can be put in ser
DOWN- means cannot be put in s

Comments:

Location: Doc Management
Issued: 8/22/02
Revised: 4/10/05

13140103FRM

LIGHT OIL / TAR OPERATOR TURN REPORT

Date 10-22-06 Turn 7-3

Operator MB Manager Leo

Unit	On	Ready	Down
(West) P9A	✓		
(East) P9B		✓	
P363A		✓	
P363B	✓		
P363C	✓		
P363D			✓
SP9A			✓
SP9B			✓
P204A		✓	
P204B	✓		
P204C		✓	✓
P207B		✓	
P207C			✓
(West)P304A			✓
(East) P304B		✓	
SP304A		✓	
SP304B		✓	
CENT SUMP H		✓	
P302A		✓	
P302B		✓	
P309A		✓	
LO DOCK SUMP A		✓	
T-311 Sump		✓	
T-312 Sump		✓	
T 331 Sump		✓	
Phenol Pump		✓	

Unit	On	Ready	Down
P400C	✓		
P400D		✓	
P452A	✓		
P452B		✓	
CHLORIDE N		✓	
CHLORIDE S		✓	
P405A			✓
P405B	✓		
P414A	✓		
P414B		✓	
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A	✓		
P418B			✓
P425A		✓	
P425B	✓		
P-453A		✓	
P-453B		✓	
P-162A		✓	
P-162B			✓
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			✓
SM. DIST SUMP S			✓

COG Drat

	East	
Start	6 47	
Stop	6 49	
Start	10 18	7
Stop	10 2	95
Start	1 36	1 08
Stop	1 38	1
Start		
Stop		

Required 3 times per shift thru Sept., 4 times per shif thru March.

ON- means in service
READY- means can be put in ser
DOWN- means cannot be put in s

Comments:

Location: Dist Management
Issued:8/22/02
Revised: 4/10/06

13140103HRM

LIGHT OIL / TAR OPERATOR TURN REPORT

Date 10-22-06 Turn 3-11

Operator TC Manager DD

Unit	On	Ready	Down
(West) P9A	✓		
(East) P9B		✓	
P363A		✓	
P363B	✓		
P363C	✓		
P363D			✓
SP9A			✓
SP9B			✓
P204A	✓		
P204B		✓	
P204C			✓
P207B	✓	✓	
P207C			✓
(West)P304A			✓
(East) P304B		✓	
SP304A		✓	
SP304B		✓	
...ONT SUMP F		✓	
P302A		✓	
P302B		✓	
P308A		✓	
LD DOCK SUMP A		✓	
T-311 Sump		✓	
T-312 Sump		✓	
T-331 Sump		✓	
Phenol Pump		✓	

Unit	On	Ready	Down
P400C	✓		
P400D		✓	
P452A	✓		
P452B		✓	
CHLORIDE N		✓	
CHLORIDE S		✓	
P405A			✓
P405B	✓		
P414A	✓		
P414B		✓	
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A	✓		
P418B			✓
P425A		✓	
P425B	✓		
P-453A		✓	
P 453B		✓	
P-162A		✓	
P-162B			✓
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			✓
SM. DIST SUMP S			✓

COG Drat

	East	W
Start	2:36	2:3
Stop	2:37	2:3
Start	8:38	8:3
Stop	8:39	8:3
Start	4:39	4:3
Stop	4:44	4:3
Start		
Stop		

Required 3 times per shift thru Sept., 4 times per shif thru March.

ON- means in service
READY- means can be put in ser
DOWN- means cannot be put in s

Comments:

Location: Doc Management
Issued: 6/22/02
Revised: 4/10/06

13140103FRM

LIGHT OIL / TAR OPERATOR TURN REPORT

Date 10-21-06 Turn 7-3

Operator M Banuelos Manager BRIAN

Unit	On	Ready	Down
(West) P9A	✓		
(East) P9B		✓	
P363A		✓	
P363B	✓		
P363C	✓		
P363D			✓
SP9A			✓
SP9B			✓
P204A	✓		
P204B		✓	
P204C			✓
P207B		✓	
P207C			✓
(West)P304A			✓
(East) P304B		✓	
SP304A		✓	
SP304B		✓	
INT SUMP F		✓	
P302A		✓	
P302B		✓	
P309A		✓	
LO DOCK SUMP A		✓	
T-311 Sump		✓	
T-312 Sump		✓	
T-331 Sump		✓	
Phenol Pump		✓	

Unit	On	Ready	Down
P400C	✓		
P400D		✓	
P452A	✓		
P452B		✓	
CHLORIDE N		✓	
CHLORIDE S		✓	
P405A			✓
P405B	✓		
P414A	✓		
P414B		✓	
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A	✓		
P418B			✓
P425A		✓	
P425B	✓		
P-453A		✓	
P-453B		✓	
P-162A		✓	
P-162B			✓
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			✓
SM. DIST SUMP S			✓

GDG Drain

	East	V
Start	7 25	6 13
Stop	7 38	6 18
Start	10 25	10
Stop	10 28	10 5
Start	1 18	12
Stop	1 20	12
Start		
Stop		

Required 3 times per shift, thru Sept., 4 times per shift thru March.

ON- means in service
READY- means can be put in ser
DOWN- means cannot be put in s

Comments:

Location: Doc Management
Issued:5/22/02
Revised: 4/10/06

13140103FRM

LIGHT OIL / TAR OPERATOR TURN REPORT

Date 10-20-06 Turn 3-11

Operator MB Manager DD

Unit	On	Ready	Down
(West) P9A	✓		
(East) P9B		✓	
P363A		✓	
P363B	✓		
P363C	✓		
P363D			✓
SP9A			✓
SP9B			✓
P204A	✓		
P204B	✓		
P204C			✓
P207B		✓	
P207C			✓
(West)P304A			✓
(East) P304B	✓		
SP304A		✓	
SP304B		✓	
INT SUMP F		✓	
P302A		✓	
P302B		✓	
P309A		✓	
LO DOCK SUMP A		✓	
T-311 Sump		✓	
T 312 Sump		✓	
T-331 Sump		✓	
Phenol Pump		✓	

Unit	On	Ready	Down
P400C	✓		
P400D		✓	
P452A	✓		
P452B		✓	
CHLORIDE N		✓	
CHLORIDE S		✓	
P405A			✓
P405B	✓		
P414A	✓		
P414B		✓	
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A	✓		
P418B			✓
P425A		✓	
P425B	✓		
P-453A		✓	
P-453B		✓	
P-162A		✓	
P-162B			✓
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			✓
SM. DIST SUMP S			✓

COG Drain

	East	W
Start	3:15	2:4
Stop	3:17	2:4
Start	6:23	6:01
Stop	6:25	6:03
Start	9:37	10:0
Stop	9:37	10:0
Start		
Stop		

Required 3 times per shift A thru Sept., 4 times per shift thru March.

ON means in service
READY - means can be put in serv
DOWN - means cannot be put in se

Comments:

Location: Doc Management
Issued: 8/22/02
Revised: 4/10/06

13140103FRM

LIGHT OIL / TAR OPERATOR TURN REPORT

Date 10-20-06 Turn 7-3

Operator M.B. Manager Leo

Unit	On	Ready	Down
(West) P9A	✓		
(East) P9B		✓	
P363A		✓	
P363B	✓		
P363C	✓		
P363D			✓
SP9A			✓
SP9B			✓
P204A	✓		
P204B	✓		
P204C			✓
P207B		✓	
P207C			✓
(West)P304A			✓
(East) P304B	✓		
SP304A		✓	
SP304B		✓	
ENT SUMP E		✓	
P302A		✓	
P302B		✓	
P309A		✓	
LD DOCK SUMP A		✓	
T-311 Sump		✓	
T-312 Sump		✓	
T-331 Sump		✓	
Phenol Pump		✓	

Unit	On	Ready	Down
P400C	✓		
P400D		✓	
P452A	✓		
P452B		✓	
CHLORIDE N		✓	
CHLORIDE S		✓	
P405A			✓
P405B	✓		
P414A	✓		
P414B		✓	
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A	✓		
P418B			✓
P425A		✓	
P425B	✓		
P-453A		✓	
P-453B		✓	
P-162A		✓	
P-162B			✓
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			✓
SM. DIST SUMP S			✓

COG Drain

	East	W
Start	720	6[illegible]
Stop	732	6[illegible]
Start	934	10[illegible]
Stop	930	10[illegible]
Start	152	1[illegible]
Stop	150	1[illegible]
Start		
Stop		

Required 3 times per shift A thru Sept., 4 times per shift thru March.

ON- means in service
READY- means can be put in serv
DOWN- means cannot be put in se

Comments:

Location: Doc Management
Issued:8/22/02
Revised: 4/10/06

13140103FRM

LIGHT OIL / TAR OPERATOR TURN REPORT

Date 10-20-06 Turn 11-7

Operator [illegible] Manager [illegible]

Unit	On	Ready	Down
(West) P9A	✓		
(East) P9B		✓	
P363A		✓	
P363B	✓		
P363C	✓		
P363D			✓
SP9A			✓
SP9B			✓
P204A	✓	✓	
P204B		✓	
P204C			✓
P207B		✓	
P207C			✓
(West)P304A			✓
(East) P304B	✓		
SP304A		✓	
SP304B		✓	
ENT SUMP E		✓	
P302A		✓	
P302B		✓	
P309A		✓	
ID DOCK SUMP A		✓	
T-311 Sump		✓	
T-312 Sump		✓	
T-331 Sump		✓	
Phenol Pump		✓	

Unit	On	Ready	Down
P400C	✓		
P400D		✓	
P452A	✓		
P452B		✓	
CHLORIDE N			
CHLORIDE S		✓	
P405A			✓
P405B	✓		
P414A	✓		
P414B		✓	
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A	✓		
P418B			✓
P425A		✓	
P425B	✓		
P-453A		✓	
P-453B		✓	
P-162A		✓	
P-162B			✓
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			✓
SM. DIST SUMP S			✓

DDG Drain

	East	W
Start	1:00	1:
Stop	1:06	1:
Start	4:10	4:
Stop	4:15	4:
Start		
Stop		
Start		
Stop		

Required 3 times per shift A thru Sept., 4 times per shift thru March.

ON- means in service
READY- means can be put in servi
DOWN- means cannot be put in se

Comments: _____

Location: Doc Management
Issued:8/22/02
Revised: 4/10/06

13140103FRM

LIGHT OIL / TAR OPERATOR TURN REPORT

Date 10-19-06 Turn 3-11

Operator TC Manager DD

Unit	On	Ready	Down
(West) P9A	✓		
(East) P9B		✓	
P363A		✓	
P363B	✓		
P363C	✓		
P363D			✓
SP9A			✓
SP9B			✓
P204A		✓	
P204B		✓	
P204C			✓
P207B		✓	
P207C			✓
(West) P304A			✓
(East) P304B	✓		
SP304A		✓	
SP304B		✓	
ENT SUMP E		✓	
P302A		✓	
P302B		✓	
P309A		✓	
LO DOCK SUMP A		✓	
T-311 Sump		✓	
T 312 Sump		✓	
T-331 Sump		✓	
Phenol Pump		✓	

Unit	On	Ready	Down
P400C	✓		
P400D		✓	
P452A	✓		
P452B		✓	
CHLORIDE N		✓	
CHLORIDE S		✓	
P405A			✓
P405B		✓	
P414A	✓		
P414B		✓	
P415A	✓	✓	
P415B			
P416A		✓	
P416B	✓		
P418A	✓		
P418B			✓
P425A		✓	
P425B	✓		
P 453A		✓	
P-453B		✓	
P-162A		✓	
P-162B			✓
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			✓
SM. DIST SUMP S			✓

COG Drain

	East	W
Start	3:06	3:0
Stop	3:08	3:0
Start		
Stop		
Start		
Stop		
Start		
Stop		

Required 3 times per shift A thru Sept., 4 times per shift thru March.

ON- means in service
READY- means can be put in servi
DOWN means cannot be put in se

Comments: _____

Location: Doc Management
Issued: 8/22/02
Revised: 4/10/06

13140103FRM

LIGHT OIL / TAR OPERATOR TURN REPORT

Date 10-19-06 Turn 7-3

Operator M. Barnes Manager Leo M.

Unit	On	Ready	Down
(West) P9A	✓		
(East) P9B		✓	
P363A		✓	
P363B	✓		
P363C	✓		
P363D			✓
SP9A			✓
SP9B			✓
P204A		✓	
P204B		✓	
P204C			✓
P207B		✓	
P207C			✓
(West)P304A			✓
(East) P304B	✓		
SP304A		✓	
SP304B		✓	
UNT SUMP F		✓	
P302A		✓	
P302B		✓	
P300A		✓	
TD DOCK SUMP A		✓	
T 311 Sump		✓	
T-312 Sump		✓	
T-331 Sump		✓	
Phenol Pump		✓	

Unit	On	Ready	Down
P400C	✓		
P400D		✓	
P452A	✓		
P452B		✓	
CHLORIDE N		✓	
CHLORIDE S		✓	
P405A			✓
P405B		✓	
P414A	✓		
P414B		✓	
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A	✓		
P418B			✓
P425A		✓	
P425B	✓		
P-453A		✓	
P-453B		✓	
P-162A		✓	
P-162B			✓
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			✓
SM. DIST SUMP S			✓

COG Drain

	East	W
Start	7:00	6:30
Stop	7:15	6:38
Start	9:25	9:45
Stop	9:27	9:47
Start	1:47	1:05
Stop	1:47	1:07
Start		
Stop		

Required 3 times per shift A thru Sept., 4 times per shift thru March.

ON- means in service
READY means can be put in serv
DOWN- means cannot be put in se

Comments: P 405A down for Mtce. P405B. Leaks to from the seal.
P 207C Kicks out

Location: Doc Management
Issued:8/22/02
Revised: 4/10/06

13140103FRM

LIGHT OIL / TAR OPERATOR TURN REPORT

Date 10-19-06 Turn 11-7

Operator [illegible] Manager DD

Unit	On	Ready	Down
(West) P9A	✓		
(East) P9B		✓	
P363A		✓	
P363B	✓		
P363C	✓		
P363D			✓
SP9A			✓
SP9B			✓
P204A		✓	
P204B		✓	
P204C			✓
P207B		✓	
P207C			✓
(West)P304A			✓
(East) P304B	✓		
SP304A		✓	
SP304B		✓	
[illegible]NT SUMP E		✓	
P302A		✓	
P302B		✓	
P309A		✓	
TO DOCK SUMP A		✓	
T-311 Sump		✓	
T-312 Sump		✓	
T-331 Sump		✓	
Phenol Pump		✓	

Unit	On	Ready	Down
P400C	✓		
P400D		✓	
P452A	✓		
P452B		✓	
CHLORIDE N		✓	
CHLORIDE S		✓	
P405A	✓		
P405B		✓	
P414A	✓		
P414B		✓	
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A	✓		
P418B			✓
P425A		✓	
P425B	✓		
P-453A		✓	
P-453B		✓	
P-162A		✓	
P-162B			✓
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			✓
SM. DIST SUMP S			✓

COG Drain

	East	W
Start	1:00	1:1
Stop	1:05	1:2
Start	3:17	3:0
Stop	3:21	3:1
Start	7:53	7:7
Stop	7:57	7:7
Start		
Stop		

Required 3 times per shift / thru Sept., 4 times per shift thru March.

ON - means in service
READY - means can be put in serv
DOWN - means cannot be put in se

Comments:

Location: Doc Management
Issued: 8/22/02
Revised: 4/10/06

13140103FRM

LIGHT OIL / TAR OPERATOR TURN REPORT

Date 10-18-06 Turn 3-11

Operator JC Manager DD

Unit	On	Ready	Down
(West) P9A	✓		
(East) P9B		✓	
P353A		✓	
P363B	✓		
P363C	✓		
P363D			✓
SP9A			✓
SP9B			✓
P204A		✓	
P204B		✓	
P204C			✓
P207B		✓	
P207C			✓
(West)P304A			✓
(East) P304B	✓		
SP304A		✓	
SP304B		✓	
ENT SUMP E		✓	
P302A		✓	
P302B		✓	
P309A		✓	
LO DOCK SUMP A		✓	
T-311 Sump		✓	
T-312 Sump			✓
T-331 Sump		✓	
Phenol Pump		✓	

Unit	On	Ready	Down
P400C	✓		
P400D		✓	
P452A	✓		
P452B		✓	
CHLORIDE N			✓
CHLORIDE S		✓	
P405A	✓		
P405B		✓	
P414A	✓		
P414B		✓	
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A	✓		
P418B			✓
P425A		✓	
P425B	✓		
P-453A		✓	
P-453B		✓	
P-162A		✓	
P-162B			✓
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			
SM. DIST SUMP S			

COG Drain

	East	W
Start	3:07	3:0
Stop	3:10	3:0
Start	5:36	5:3
Stop	5:38	5:3
Start	8:06	8:0
Stop	8:07	8:0
Start		
Stop		

Required 3 times per shift / thru Sept., 4 times per shift thru March.

ON means in service
READY- means can be put in ser
DOWN- means cannot be put in s

Comments:

Location: Doc Management
Issued: 8/23/02
Revised: 4/10/06

13140103FRM

LIGHT OIL / TAR OPERATOR TURN REPORT

Date 10/18/06 Turn 7-3

Operator E. Moore Manager Leo McD.

Unit	On	Ready	Down
(West) P9A	✓		
(East) P9B		✓	
P363A		✓	
P363B	✓		
P363C	✓		
P363D			✓
SP9A			✓
SP9B			✓
P204A		✓	
P204B		✓	
P204C			✓
P207B		✓	
P207C			✓
(West)P304A			✓
(East) P304B	✓		
SP304A		✓	
SP304B		✓	
ANT SUMP E	✓	✓	
P302A		✓	
P302B		✓	
P309A		✓	
TO DOCK SUMP A		✓	
T-311 Sump		✓	
T-312 Sump			✓
T-331 Sump	✓		
Phenol Pump		✓	

Unit	On	Ready	Down
P400C	✓		
P400D		✓	
P452A	✓		
P452B		✓	
CHLORIDE N			✓
CHLORIDE S		✓	
P405A	✓		
P405B		✓	
P414A	✓		
P414B		✓	
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A	✓		
P418B			✓
P425A		✓	
P425B	✓		
P-453A		✓	
P-453B		✓	
P-162A		✓	
P-162B			✓
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N		✓	
SM. DIST SUMP S	✓		

COG Drain

	East	W
Start	7:34	7:0
Stop	7:41	7:09
Start	10:31	10:1
Stop	10:37	10:1
Start	12:01	12:0
Stop	12:03	12:0
Start		
Stop		

Required 3 times per shift A thru Sept., 4 times per shift thru March.

ON- means in service
READY- means s
DOWN- means

Comments: P-405A leaking, T-312 pump don't work, North C

Location: Doc Management
Issued: 8/22/02
Revised: 4/10/06

LIGHT OIL / TAR OPERATOR TURN REPORT

Date 10-18-06 Turn 11-7

Operator R Hall Manager Ref

Unit	On	Ready	Down
(West) P9A	✓		
(East) P9B		✓	
P363A		✓	
P363B		✓	
P363C	✓		
P363D			✓
SP9A			✓
SP9B			✓
P204A		✓	
P204B		✓	
P204C			✓
P207B		✓	
P207C			✓
(West)P304A			✓
(East) P304B	✓		
SP304A		✓	
SP304B		✓	
INT SUMP F		✓	
P302A		✓	
P302B		✓	
P309A		✓	
TO DOCK SUMP A		✓	
T-311 Sump	✓	✓	
T-312 Sump	✓	✓	
T-331 Sump		✓	
Phenol Pump		✓	

Unit	On	Ready	Down
P400C	✓		
P400D		✓	
P452A	✓		
P452B		✓	
CHLORIDE N		✓	
CHLORIDE S		✓	
P405A	✓		
P405B		✓	
P414A	✓		
P414B		✓	
P415A		✓	
P415B	✓		
P416A	✓	✓	
P416B	✓		
P418A	✓		
P418B			✓
P425A		✓	
P425B	✓		
P-453A		✓	
P-453B		✓	
P-162A		✓	
P-162B			✓
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			✓
SM. DIST SUMP S			✓

COG Drain

	East	W
Start	1:30	1:3
Stop	1:35	1:4
Start	4:38	4:
Stop	4:43	4:
Start		
Stop		
Start		
Stop		

Required 3 times per shift / thru Sept., 4 times per shift thru March.

ON means in service
READY means can be put in serv
DOWN- means cannot be put in se

Comments:

Location: Doc Management
Issued:8/23/02
Revised: 4/10/06

131401D3FRM

LIGHT OIL / TANK OPERATOR TURN REPORT

Date 10-17-06 Turn 3-11

Operator M. Barrueto Manager Rex G.

Unit	On	Ready	Down
(West) P8A	✓		
(East) P8B		✓	
P363A		✓	
P363B			
P363C	✓		
P363D			✓
SP9A			✓
SP9B			✓
P204A		✓	
P204B		✓	
P204C			✓
P207B		✓	
P207C			✓
(West) P304A			✓
(East) P304B	✓		
SP304A		✓	
SP304B		✓	
INT SUMP F		✓	
P302A		✓	
P302B		✓	
P303A		✓	
TO DOCK SUMP A		✓	
T 311 Sump		✓	
T-312 Sump		✓	
T-331 Sump		✓	
Phenol Pump		✓	

Unit	On	Ready	Down
P400C	✓		
P400D		✓	
P452A	✓		
P452B		✓	
CHLORIDE N			✓
CHLORIDE S		✓	
P405A	✓		
P405B		✓	
P414A	✓		
P414B		✓	
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A	✓		
P418B			✓
P425A		✓	
P425B	✓		
P-453A		✓	
P-453B		✓	
P-162A		✓	
P-162B			✓
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			✓
SM. DIST SUMP S			✓

COG Drain

	East	W
Start	3[illegible]	2[illegible]
Stop	3[illegible]	2[illegible]
Start	651	63[illegible]
Stop	653	63[illegible]
Start	943	910
Stop	946	912
Start		
Stop		

Required 3 times per shift A[illegible] thru Sept., 4 times per shift thru March.

ON- means in service
READY means can be put in serv
DOWN- means cannot be put in se

Comments:

Location: Doc Management
Issued: 8/22/02
Revised: 4/10/06

13140103FRM

LIGHT OIL / TAR OPERATOR TURN REPORT

Date 10-17-06 Turn 11-7

Operator [illegible] II Manager Kyle

Unit	On	Ready	Down
(West) P9A	✓	✓	
(East) P9B		✓	
P363A		✓	
P363B		✓	
P363C	✓		
P363D			✓
SP9A			✓
SP9B			✓
P204A		✓	
P204B		✓	
P204C			✓
P207B		✓	
P207C			✓
(West)P304A			✓
(East) P304B	✓		
SP304A		✓	
SP304B		✓	
:NT SUMP E		✓	
P302A		✓	
P302B		✓	
P309A		✓	
LO DOCK SUMP A		✓	
T-311 Sump		✓	
T-312 Sump		✓	
T-331 Sump		✓	
Phenol Pump		✓	

Unit	On	Ready	Down
P400C	✓		
P400D		✓	
P452A	✓		
P452B		✓	
CHLORIDE N			✓
CHLORIDE S		✓	
P405A	✓		
P405B		✓	
P414A	✓		
P414B		✓	
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A	✓		
P418B			✓
P425A	✓	✓	
P425B	✓		
P 453A		✓	
P-453B		✓	
P-162A		✓	
P-162B			✓
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			✓
SM. DIST SUMP S			✓

COG Drain

	East	W
Start	1:13	1:0
Stop	1:20	1:0
Start	4:40	4:3
Stop	4:45	4:3
Start		
Stop		
Start		
Stop		

Required 3 times per shift A thru Sept., 4 times per shift thru March.

ON means in service
READY- means can be put in serv
DOWN- means cannot be put in se

Comments:

Location: Dnr Management
Issued: 8/22/07
Revised: 4/10/08

13140103HRM

LIGHT OIL / TAR OPERATOR TURN REPORT

Date/ 07-17-06 Turn 1/-7

Operator [illegible] Manager [illegible]

Unit	On	Ready	Down
(West) P9A	✓		
(East) P9B		✓	
P363A		✓	
P363B		✓	
P363C	✓		
P363D			✓
SP9A			✓
SP9B			✓
P204A		✓	
P204B		✓	
P204C			✓
P207B		✓	
P207C			✓
(West) P304A		▨	✓
(East) P304B	✓	▨	
SP304A		✓	
SP304B		✓	
[illegible]ENT SUMP F		✓	
P302A		✓	
P302B		✓	
P309A		✓	
[illegible]D DOCK SUMP A		✓	
T-311 Sump		✓	
T-312 Sump		✓	
T-331 Sump		✓	
Phenol Pump		✓	

Unit	On	Ready	Down
P400C	✓		
P400D		✓	
P452A	✓	▨	
P452B	▨	✓	
CHLORIDE N		✓	
CHLORIDE S		✓	
P405A	✓		
P405B		✓	
P414A	✓		
P414B		✓	
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A	✓		
P418B			✓
P425A	▨	✓	
P425B	✓		
P-453A		✓	
P-453B		✓	
P-162A		✓	
P-162B			✓
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			✓
SM. DIST SUMP S			✓

COG Drain

	East	W
Start	12:40	12:[illegible]
Stop	12:45	1:[illegible]
Start		
Stop		
Start		
Stop		
Start		
Stop		

Required 3 times per shift [illegible] thru Sept., 4 times per shift thru March.

ON means in service

READY- means can be put in serv

DOWN- means cannot be put in se

Comments:

Location: Doc Management
Issued: 8/22/02
Revised: 4/10/06

13140103FRM

Date 10-31-06

Rev. 1/20/06 13140121.frm

OIL TAR
DAILY CHECK-OFF LIST

		Check Each Turn		
		1ST	2ND	3RD
1.	Check and review past 2 turns operating log sheets for changes in Process or equipment conditions.	✓	✓	✓
2.	Walk through - Visually check area and equipment for any spill, leaks or equipment failure at start of turn (inside and outside from Pitch Plant to Distillation area).	✓	✓	✓
3.	Check all safety equipment and devices for proper set up (include eye wash stations and safety showers) Report any abnormal conditions.	✓	✓	✓
4	Report any spills or leaks made or found through out turn.	✓	✓	✓
5.	Check all pumps and turbines for proper lubrication, unusual noises, or vibration.	✓	✓	✓
6.	Check all gauges (Pressure temperature and levels) for cleanliness and proper operation of needles. Change gauges or adjust temperature as needed.	✓	✓	✓
7.	Empty all tar buckets at end of shift, and report any full buckets found at start of shift.	✓	✓	✓
8.	Take all required samples (follow guide line sample sheet). Samples taken on 11-7 are: T-0, T-369A, P-415, P-452 T-304A, T-304B, T-304C & T-304C & P.302 (2x)	✓ YES	N/A	N/A
9.	Check and drain gas main drains 2-times a turn during cold weather and log it once during warmer weather or as needed.	✓	✓	✓
10.	Check Tank (T-304A, B, C and T-306 C) for water each turn. Drain if needed.	✓	✓	✓
11.	Check all tanks on recycle for proper valve settings and operational mixers on for leaks and noises.	✓	✓	✓
12.	Work on assigned housekeeping area.	✓	✓	✓
13.	Make a personal report of general conditions for operator taking over shift (include any Maintenance or Contractor work going on etc., or any abnormal changes in operation)	✓	✓	✓
14	Check that all tar buckets have tar tags, fix the ones that don't have tags.	✓	✓	✓

* Bring this sheet to line up.

COMMENTS 7-3 SP-304B (above ground sump) suction is plugged. Steaming + Bleeding
3-1 SP-304B is open now

	Oil/Tar Initials	Mgr./TL Initials
11-7	TC *	
7-3	EM *	
3-11	EM *	[illegible]

* by operator initial means that all listed items were done and management was informed of any problems / abnormalities.

Location: Doc Management

Date 10-30-06

Rev. 1/20/06 13140121.frm

OIL TAR
DAILY CHECK-OFF LIST

		Check Each Turn		
		1ST	2ND	3RD
1.	Check and review past 2 turns operating log sheets for changes in Process or equipment conditions.	✓	✓	✓
2.	Walk through - Visually check area and equipment for any spill, leaks or equipment failure at start of turn (inside and outside from Pitch Plant to Distillation area).	✓	✓	✓
3.	Check all safety equipment and devices for proper set up (include eye wash stations and safety showers) Report any abnormal conditions.	✓	✓	✓
4	Report any spills or leaks made or found through out turn.	✓	✓	✓
5.	Check all pumps and turbines for proper lubrication, unusual noises, or vibration.	✓	✓	✓
6.	Check all gauges (Pressure temperature and levels) for cleanliness and proper operation of needles. Change gauges or adjust temperature as needed.	✓	✓	✓
7.	Empty all tar buckets at end of shift, and report any full buckets found at start of shift.	✓	✓	✓
8.	Take all required samples (follow guide line sample sheet). Samples taken on 11-7 are: T-9, T-363 A & D, T-306C. T-304 ABC P.415 P.452 P 362 (2X)	Yes	Yes	N/A
9.	Check and drain gas main drains 2-times a turn during cold weather and log it once during warmer weather or as needed.	✓	✓	✓
10.	Check Tank (T-304A, B, C and T-306 C) for water each turn. Drain if needed.	✓	✓	✓
11.	Check all tanks on recycle for proper valve settings and operational mixers on for leaks and noises.	✓	✓	✓
12.	Work on assigned housekeeping area.	✓	✓	✓
13.	Make a personal report of general conditions for operator taking over shift (include any Maintenance or Contractor work going on etc., or any abnormal changes in operation)	✓	✓	✓
14	Check that all tar buckets have tar tags, fix the ones that don't have tags.	✓	✓	✓

* Bring this sheet to line up.

COMMENTS T-304C still leaking from drain line (where it was fiberglassed)

7-3 Took Resampler ON T-9 & P.452.

3-11 Please check all pump oil globes regularly (Found 2 globes empty)

	Oil/Tar Initials	Mgr./TL Initials
11-7	MB *	[illegible]
7-3	MB *	[illegible]
3-11	GM *	[illegible]

* by operator initial means that all listed items were done and management was informed of any problems / abnormalities.

Location: Doc Management

Date 10-29-06 Rev. 1/20/06 13140121.frm

OIL TAR
DAILY CHECK-OFF LIST

		Check Each Turn		
		1ST	2ND	3RD
1.	Check and review past 2 turns operating log sheets for changes in Process or equipment conditions.	✓	✓	✓
2.	Walk through - Visually check area and equipment for any spill, leaks or equipment failure at start of turn (inside and outside from Pitch Plant to Distillation area).	✓	✓	✓
3.	Check all safety equipment and devices for proper set up (include eye wash stations and safety showers) Report any abnormal conditions.	✓	✓	✓
4	Report any spills or leaks made or found through out turn.	✓	✓	✓
5.	Check all pumps and turbines for proper lubrication, unusual noises, or vibration.	✓	✓	✓
6.	Check all gauges (Pressure temperature and levels) for cleanliness and proper operation of needles. Change gauges or adjust temperature as needed.	✓	✓	✓
7.	Empty all tar buckets at end of shift, and report any full buckets found at start of shift.	✓	✓	✓
8.	Take all required samples (follow guide line sample sheet). Samples taken on 11-7 are: T-9, T-363 A & D, T-304 A B C, T-306C P.415 P.452.	Yes	N/A	N/A
9.	Check and drain gas main drains 2-times a turn during cold weather and log it once during warmer weather or as needed.	✓	✓	✓
10.	Check Tank (T-304A, B, C and T-306 C) for water each turn. Drain if needed.	✓	✓	✓
11.	Check all tanks on recycle for proper valve settings and operational mixers on for leaks and noises.	✓	✓	✓
12.	Work on assigned housekeeping area.	✓	✓	✓
13.	Make a personal report of general conditions for operator taking over shift (include any Maintenance or Contractor work going on etc., or any abnormal changes in operation)	✓	✓	✓
14	Check that all tar buckets have tar tags, fix the ones that don't have tags.	✓	✓	✓

* Bring this sheet to line up.

Very Important

COMMENTS (3-11) Please leave steam on discharge line of Chlorids pump when done pumping. Discharge valve was found close & steam on going nowhere.

	Oil/Tar Initials	Mgr./TL Initials
11-7	MB *	BKM
7-3	PH *	
3-11	EM *	BKM

* by operator initial means that all listed items were done and management was informed of any problems / abnormalities.

Location: Doc Management

Date 10/28/06 Rev. 1/20/06 13140121.frm

OIL TAR
DAILY CHECK-OFF LIST

		Check Each Turn 1ST	2ND	3RD
1.	Check and review past 2 turns operating log sheets for changes in Process or equipment conditions.	✓	✓	✓
2.	Walk through - Visually check area and equipment for any spill, leaks or equipment failure at start of turn (inside and outside from Pitch Plant to Distillation area).	✓	✓	✓
3.	Check all safety equipment and devices for proper set up (include eye wash stations and safety showers) Report any abnormal conditions.	✓	✓	✓
4	Report any spills or leaks made or found through out turn.	✓	✓	✓
5.	Check all pumps and turbines for proper lubrication, unusual noises, or vibration.	✓	✓	✓
6.	Check all gauges (Pressure temperature and levels) for cleanliness and proper operation of needles. Change gauges or adjust temperature as needed.	✓	✓	✓
7.	Empty all tar buckets at end of shift, and report any full buckets found at start of shift.	✓	✓	✓
8.	Take all required samples (follow guide line sample sheet). Samples taken on 11-7 are: T-9, T-363 A & D, T-306C, T304ABC P.415 P.452.	[illegible]	N/A	N/A
9.	Check and drain gas main drains 2-times a turn during cold weather and log it once during warmer weather or as needed.	✓	✓	✓
10.	Check Tank (T-304A, B, C and T-306 C) for water each turn. Drain if needed.	✓	✓	✓
11.	Check all tanks on recycle for proper valve settings and operational mixers on for leaks and noises.	✓	✓	✓
12.	Work on assigned housekeeping area.	✓	✓	✓
13.	Make a personal report of general conditions for operator taking over shift (include any Maintenance or Contractor work going on etc., or any abnormal changes in operation)	✓	✓	✓
14	Check that all tar buckets have tar tags, fix the ones that don't have tags.	✓	✓	✓

* Bring this sheet to line up.

COMMENTS 7-3 T-304C (drain line is leaking) Cannot drain tank. The leaking is coming from the same place it was fiberglassed at.
3-11 P-400 west is leaking also.

	Oil/Tar Initials	Mgr./TL Initials
11-7	MB *	
7-3	EM *	
3-11	EM *	BKM

* by operator initial means that all listed items were done and management was informed of any problems / abnormalities.

Location: Doc Management

Date 10-27-06

Rev. 1/20/08 13140121.frm

OIL TAR
DAILY CHECK-OFF LIST

		Check Each Turn		
		1ST	2ND	3RD
1.	Check and review past 2 turns operating log sheets for changes in Process or equipment conditions.	✓	✓	✓
2.	Walk through - Visually check area and equipment for any spill, leaks or equipment failure at start of turn (inside and outside from Pitch Plant to Distillation area).	✓	✓	✓
3.	Check all safety equipment and devices for proper set up (include eye wash stations and safety showers) Report any abnormal conditions.	✓		✓
4.	Report any spills or leaks made or found through out turn.	✓	✓	✓
5.	Check all pumps and turbines for proper lubrication, unusual noises, or vibration.	✓	✓	✓
6.	Check all gauges (Pressure temperature and levels) for cleanliness and proper operation of needles. Change gauges or adjust temperature as needed.	✓	✓	✓
7.	Empty all tar buckets at end of shift, and report any full buckets found at start of shift.	✓	✓	✓
8.	Take all required samples (follow guide line sample sheet). Samples taken on 11-7 are: T-9, T-363A,D, T-306A, T-304ABC, P-415, P-415Z	Yes	N/A	N/A
9.	Check and drain gas main drains 2-times a turn during cold weather and log it once during warmer weather or as needed.	✓	✓	✓
10.	Check Tank (T-304A, B, C and T-306 C) for water each turn. Drain if needed.	✓	✓	✓
11.	Check all tanks on recycle for proper valve settings and operational mixers on for leaks and noises.	✓	✓	✓
12.	Work on assigned housekeeping area.	✓	✓	✓
13.	Make a personal report of general conditions for operator taking over shift (include any Maintenance or Contractor work going on etc., or any abnormal changes in operation)	✓	✓	✓
14	Check that all tar buckets have tar tags, fix the ones that don't have tags.	✓	✓	✓

* Bring this sheet to line up.

COMMENTS _____

	Oil/Tar Initials	Mgr./Tl Initials
11-7	MB *	[illegible]
7-3	[illegible]	[illegible]
3-11	[illegible]	

* by operator initial means that all listed items were done and management was informed of any problems / abnormalities.

Location: Doc Management

Date 10-26-06

Rev. 1/20/06 13140121.fm

OIL TAR
DAILY CHECK-OFF LIST

		Check Each Turn		
		1ST	2ND	3RD
1.	Check and review past 2 turns operating log sheets for changes in Process or equipment conditions.	✓	✓	✓
2.	Walk through - Visually check area and equipment for any spill, leaks or equipment failure at start of turn (inside and outside from Pitch Plant to Distillation area).	✓	✓	✓
3.	Check all safety equipment and devices for proper set up (include eye wash stations and safety showers) Report any abnormal conditions.	✓	✓	
4	Report any spills or leaks made or found through out turn.	✓	✓	✓
5.	Check all pumps and turbines for proper lubrication, unusual noises, or vibration.	✓	✓	✓
6.	Check all gauges (Pressure temperature and levels) for cleanliness and proper operation of needles. Change gauges or adjust temperature as needed.	✓	✓	✓
7.	Empty all tar buckets at end of shift, and report any full buckets found at start of shift.	✓	✓	✓
8.	Take all required samples (follow guide line sample sheet). Samples taken on 11-7 are: T-9, T-363A&D, P.302 (2x), P.415 P-452A, T-306C, T-304A, B&C	Yes	N/A	N/A
9.	Check and drain gas main drains 2-times a turn during cold weather and log it once during warmer weather or as needed.	✓	✓	✓
10.	Check Tank (T-304A, B, C and T-306 C) for water each turn. Drain if needed.	✓	✓	✓
11.	Check all tanks on recycle for proper valve settings and operational mixers on for leaks and noises.	✓	✓	✓
12.	Work on assigned housekeeping area.	✓	✓	✓
13.	Make a personal report of general conditions for operator taking over shift (include any Maintenance or Contractor work going on etc., or any abnormal changes in operation)	✓	✓	✓
14	Check that all tar buckets have tar tags, fix the ones that don't have tags.	✓	✓	✓

* Bring this sheet to line up.

COMMENTS 11-7 No Power in Pitch Plant. Need Heater in Pitch Plant.

	Oil/Tar Initials	Mgr./TL Initials
11-7	MB *	[illegible]
7-3	MB/RH *	[illegible]
3-11	[illegible]	[illegible]

* by operator initial means that all listed items were done and management was informed of any problems / abnormalities.

Location: Doc Management

Date 10-25-01

Rev. 1/20/06 13140121.frm

OIL TAR
DAILY CHECK-OFF LIST

		Check Each Turn		
		1ST	2ND	3RD
1.	Check and review past 2 turns operating log sheets for changes in Process or equipment conditions.	✓	✓	✓
2.	Walk through - Visually check area and equipment for any spill, leaks or equipment failure at start of turn (inside and outside from Pitch Plant to Distillation area).	✓	✓	✓
3.	Check all safety equipment and devices for proper set up (include eye wash stations and safety showers) Report any abnormal conditions.	✓	✓	✓
4	Report any spills or leaks made or found through out turn.	✓	✓	✓
5.	Check all pumps and turbines for proper lubrication, unusual noises, or vibration.	✓	✓	✓
6.	Check all gauges (Pressure temperature and levels) for cleanliness and proper operation of needles. Change gauges or adjust temperature as needed.	✓	✓	✓
7.	Empty all tar buckets at end of shift, and report any full buckets found at start of shift.	✓	✓	✓
8.	Take all required samples (follow guide line sample sheet). Samples taken on 11-7 are: T-9, T-363A, T-363D, P-415, P-452 T-304A, T-304B, T-304C, T-306C	✓ Yes	NA	N/a
9.	Check and drain gas main drains 2-times a turn during cold weather and log it once during warmer weather or as needed.	✓	✓	✓
10.	Check Tank (T-304A, B, C and T-306 C) for water each turn. Drain if needed.	✓	✓	✓
11.	Check all tanks on recycle for proper valve settings and operational mixers on for leaks and noises.	✓	✓	✓
12.	Work on assigned housekeeping area.	✓	✓	✓
13.	Make a personal report of general conditions for operator taking over shift (include any Maintenance or Contractor work going on etc., or any abnormal changes in operation)	✓	✓	✓
14	Check that all tar buckets have tar tags, fix the ones that don't have tags.	✓	✓	

* Bring this sheet to line up.

COMMENTS _____

	Oil/Tar Initials	Mgr./TL Initials
11-7	TC*	
7-3	TC*	BKM
3-11	RHC	BKM

* by operator initial means that all listed items were done and management was informed of any problems / abnormalities.

Location: Doc Management

Date 10-27-06

Rev. 1/20/06 13140121.frm

OIL TAR
DAILY CHECK-OFF LIST

		Check Each Turn		
		1ST	2ND	3RD
1.	Check and review past 2 turns operating log sheets for changes in Process or equipment conditions.	✓	✓	
2.	Walk through - Visually check area and equipment for any spill, leaks or equipment failure at start of turn (inside and outside from Pitch Plant to Distillation area).	✓	✓	
3.	Check all safety equipment and devices for proper set up (include eye wash stations and safety showers) Report any abnormal conditions.	✓	✓	
4	Report any spills or leaks made or found through out turn.	✓	✓	
5.	Check all pumps and turbines for proper lubrication, unusual noises, or vibration.	✓	✓	
6.	Check all gauges (Pressure temperature and levels) for cleanliness and proper operation of needles. Change gauges or adjust temperature as needed.	✓	✓	
7.	Empty all tar buckets at end of shift, and report any full buckets found at start of shift.			
8.	Take all required samples (follow guide line sample sheet). Samples taken on 11-7 are: T-9, T-363A+D, T-304A, B, C, T-306C, p.302(2), p.415, p.452	yes	✓	
9.	Check and drain gas main drains 2-times a turn during cold weather and log it once during warmer weather or as needed.	✓	✓	
10.	Check Tank (T-304A, B, C and T-306 C) for water each turn. Drain if needed.	✓	✓	
11.	Check all tanks on recycle for proper valve settings and operational mixers on for leaks and noises.	✓	✓	
12.	Work on assigned housekeeping area.	✓	✓	
13.	Make a personal report of general conditions for operator taking over shift (include any Maintenance or Contractor work going on etc., or any abnormal changes in operation)	✓	✓	
14	Check that all tar buckets have tar tags, fix the ones that don't have tags.			

* Bring this sheet to line up.

COMMENTS Pump 405 B Leaking

	Oil/Tar Initials	Mgr./TL Initials
11-7	[illegible] *	[illegible]
7-3	TC *	[illegible]
3-11	*	

* by operator initial means that all listed items were done and management was informed of any problems / abnormalities.

Location: Doc Management

Date 10-23-06

Rev. 1/20/06 13140121.frm

OIL TAR
DAILY CHECK-OFF LIST

		Check Each Turn		
		1ST	2ND	3RD
1.	Check and review past 2 turns operating log sheets for changes in Process or equipment conditions.	✓	✓	✓
2.	Walk through - Visually check area and equipment for any spill, leaks or equipment failure at start of turn (inside and outside from Pitch Plant to Distillation area).	✓	✓	✓
3.	Check all safety equipment and devices for proper set up (include eye wash stations and safety showers) Report any abnormal conditions.	✓	✓	✓
4	Report any spills or leaks made or found through out turn.	✓	✓	none
5.	Check all pumps and turbines for proper lubrication, unusual noises, or vibration.	✓	✓	✓
6.	Check all gauges (Pressure temperature and levels) for cleanliness and proper operation of needles. Change gauges or adjust temperature as needed.	✓	✓	
7.	Empty all tar buckets at end of shift, and report any full buckets found at start of shift.	✓	✓	✓
8.	Take all required samples (follow guide line sample sheet). Samples taken on 11-7 are: T-9, T363 A & D, T-306C, T304ABC P-415	yes	yes	N/A
9.	Check and drain gas main drains 2-times a turn during cold weather and log it once during warmer weather or as needed.	✓	✓	✓
10.	Check Tank (T-304A, B, C and T-306 C) for water each turn. Drain if needed.	✓	✓	✓
11.	Check all tanks on recycle for proper valve settings and operational mixers on for leaks and noises.	✓	✓	✓
12.	Work on assigned housekeeping area.	✓	✓	✓
13.	Make a personal report of general conditions for operator taking over shift (include any Maintenance or Contractor work going on etc., or any abnormal changes in operation)	✓	✓	✓
14	Check that all tar buckets have tar tags, fix the ones that don't have tags.	✓	✓	

* Bring this sheet to line up.

COMMENTS 7-3 Took T-9 Resample.

	Oil/Tar Initials	Mgr./TL Initials
11-7	MB *	C.[illegible]
7-3	MB *	B.[illegible]
3-11	RH *	[illegible]

* by operator initial means that all listed items were done and management was informed of any problems / abnormalities.

Location: Doc Management

Date 10-22-06 Rev. 1/20/06 13140121.frm

OIL TAR
DAILY CHECK-OFF LIST

		Check Each Turn		
		1ST	2ND	3RD
1.	Check and review past 2 turns operating log sheets for changes in Process or equipment conditions.	✓	✓	
2.	Walk through - Visually check area and equipment for any spill, leaks or equipment failure at start of turn (inside and outside from Pitch Plant to Distillation area).	✓	✓	
3.	Check all safety equipment and devices for proper set up (include eye wash stations and safety showers) Report any abnormal conditions.	✓	✓	
4	Report any spills or leaks made or found through out turn.	✓	✓	
5.	Check all pumps and turbines for proper lubrication, unusual noises, or vibration.	✓	✓	
6.	Check all gauges (Pressure temperature and levels) for cleanliness and proper operation of needles. Change gauges or adjust temperature as needed.	✓	✓	
7.	Empty all tar buckets at end of shift, and report any full buckets found at start of shift.	✓	✓	
8.	Take all required samples (follow guide line sample sheet). Samples taken on 11-7 are: T-9, T-363A, T-363D, P-415, P-452 T-304A, T-304B, T-304C & T-306C	✓ yes	N/A	
9.	Check and drain gas main drains 2-times a turn during cold weather and log it once during warmer weather or as needed.	✓	✓	
10.	Check Tank (T-304A, B, C and T-306 C) for water each turn. Drain if needed.	✓	✓	
11.	Check all tanks on recycle for proper valve settings and operational mixers on for leaks and noises.	✓	✓	
12.	Work on assigned housekeeping area.	✓	✓	
13.	Make a personal report of general conditions for operator taking over shift (include any Maintenance or Contractor work going on etc., or any abnormal changes in operation)	✓	✓	
14	Check that all tar buckets have tar tags, fix the ones that don't have tags.	✓	✓	

* Bring this sheet to line up.

COMMENTS _____

	Oil/Tar Initials	Mgr./TL Initials
11-7	TC *	[illegible]
7-3	MB *	[illegible]
3-11	TC *	[illegible]

* by operator initial means that all listed items were done and management was informed of any problems / abnormalities.

Location: Doc Management

Date 10-21-06 Rev. 1/20/06 13140121.frm

OIL TAR
DAILY CHECK-OFF LIST

		Check Each Turn		
		1ST	2ND	3RD
1.	Check and review past 2 turns operating log sheets for changes in Process or equipment conditions.		✓	✓
2.	Walk through - Visually check area and equipment for any spill, leaks or equipment failure at start of turn (inside and outside from Pitch Plant to Distillation area).		✓	✓
3.	Check all safety equipment and devices for proper set up (include eye wash stations and safety showers) Report any abnormal conditions.		✓	✓
4.	Report any spills or leaks made or found through out turn.		✓	✓
5.	Check all pumps and turbines for proper lubrication, unusual noises, or vibration.		✓	✓
6.	Check all gauges (Pressure temperature and levels) for cleanliness and proper operation of needles. Change gauges or adjust temperature as needed.		✓	✓
7.	Empty all tar buckets at end of shift, and report any full buckets found at start of shift.		✓	✓
8.	Take all required samples (follow guide line sample sheet). Samples taken on 11-7 are:_____		N/A	✓
9.	Check and drain gas main drains 2-times a turn during cold weather and log it once during warmer weather or as needed.		✓	✓
10.	Check Tank (T-304A, B, C and T-306 C) for water each turn. Drain if needed.		✓	✓
11.	Check all tanks on recycle for proper valve settings and operational mixers on for leaks and noises.		✓	✓
12.	Work on assigned housekeeping area.		✓	✓
13.	Make a personal report of general conditions for operator taking over shift (include any Maintenance or Contractor work going on etc., or any abnormal changes in operation)		✓	✓
14.	Check that all tar buckets have tar tags, fix the ones that don't have tags.		✓	✓

* Bring this sheet to line up.

COMMENTS _____

	Oil/Tar Initials	Mgr./TL Initials
11-7	*	
7-3	MB *	
3-11	TC *	

* by operator initial means that all listed items were done and management was informed of any problems / abnormalities.

Location: Doc Management

Date 10-20-06 Rev.

OIL TAR
DAILY CHECK-OFF LIST

		Check Each Turn		
		1ST	2ND	3RD
1.	Check and review past 2 turns operating log sheets for changes in Process or equipment conditions.	✓	✓	✓
2.	Walk through - Visually check area and equipment for any spill, leaks or equipment failure at start of turn (inside and outside from Pitch Plant to Distillation area).	✓	✓	✓
3.	Check all safety equipment and devices for proper set up (include eye wash stations and safety showers) Report any abnormal conditions.	✓	✓	✓
4.	Report any spills or leaks made or found through out turn.	✓	✓	✓
5.	Check all pumps and turbines for proper lubrication, unusual noises, or vibration.	✓	✓	✓
6.	Check all gauges (Pressure temperature and levels) for cleanliness and proper operation of needles. Change gauges or adjust temperature as needed.	✓	✓	✓
7.	Empty all tar buckets at end of shift, and report any full buckets found at start of shift.	✓	✓	✓
8.	Take all required samples (follow guide line sample sheet). Samples taken on 11-7 are: T-9, T-340 A+D, T-304 A, B, C, T-306C	yes	N/A	N/A
9.	Check and drain gas main drains 2-times a turn during cold weather and log it once during warmer weather or as needed.	✓	✓	✓
10.	Check Tank (T-304A, B, C and T-306 C) for water each turn. Drain if needed.	✓	✓	✓
11.	Check all tanks on recycle for proper valve settings and operational mixers on for leaks and noises.	✓	✓	✓
12.	Work on assigned housekeeping area.	✓	✓	✓
13.	Make a personal report of general conditions for operator taking over shift (include any Maintenance or Contractor work going on etc., or any abnormal changes in operation)	✓	✓	✓
14	Check that all tar buckets have tar tags, fix the ones that don't have tags.	✓	✓	

* Bring this sheet to line up.

COMMENTS _____

	Oil/Tar Initials	Mgr./TL Initials
11-7	RH *	[illegible]
7-3	MB *	[illegible]
3-11	MB *	

* by operator initial means that all listed items were done and management was informed of any problems / abnormalities.

Location: Doc Management

Date 10-20-06

Rev. 1/20/06 13140121.frm

OIL TAR
DAILY CHECK-OFF LIST

		Check Each Turn		
		1ST	2ND	3RD
1.	Check and review past 2 turns operating log sheets for changes in Process or equipment conditions.	✓		
2.	Walk through - Visually check area and equipment for any spill, leaks or equipment failure at start of turn (inside and outside from Pitch Plant to Distillation area).	✓		
3.	Check all safety equipment and devices for proper set up (include eye wash stations and safety showers) Report any abnormal conditions.			
4	Report any spills or leaks made or found through out turn.			
5.	Check all pumps and turbines for proper lubrication, unusual noises, or vibration.	✓		
6.	Check all gauges (Pressure temperature and levels) for cleanliness and proper operation of needles. Change gauges or adjust temperature as needed.			
7.	Empty all tar buckets at end of shift, and report any full buckets found at start of shift.	✓		
8.	Take all required samples (follow guide line sample sheet). Samples taken on 11-7 are: T-9, T-340 A+D, T-304 A, B, C, T-306C	yes		
9.	Check and drain gas main drains 2-times a turn during cold weather and log it once during warmer weather or as needed.	✓		
10.	Check Tank (T-304A, B, C and T-306 C) for water each turn. Drain if needed.	✓	✓	
11.	Check all tanks on recycle for proper valve settings and operational mixers on for leaks and noises.	✓		
12.	Work on assigned housekeeping area.	✓		
13.	Make a personal report of general conditions for operator taking over shift (include any Maintenance or Contractor work going on etc., or any abnormal changes in operation)	✓		
14	Check that all tar buckets have tar tags, fix the ones that don't have tags.			

* Bring this sheet to line up.

COMMENTS Empty Buckets - Questionable - (Clarification)

	Oil/Tar Initials	Mgr./TL Initials
11-7	RH *	Brian
7-3	*	
3-11	*	

* by operator initial means that all listed items were done and management was informed of any problems / abnormalities.

Location: Doc Management

Date 10-19-06

Rev. 1/20/06 13140121.frm

OIL TAR
DAILY CHECK-OFF LIST

		Check Each Turn		
		1ST	2ND	3RD
1.	Check and review past 2 turns operating log sheets for changes in Process or equipment conditions.	✓	✓	✓
2.	Walk through - Visually check area and equipment for any spill, leaks or equipment failure at start of turn (inside and outside from Pitch Plant to Distillation area).	✓	✓	✓
3.	Check all safety equipment and devices for proper set up (include eye wash stations and safety showers) Report any abnormal conditions.	✓	✓	✓
4.	Report any spills or leaks made or found through out turn.	✓	✓	✓
5.	Check all pumps and turbines for proper lubrication, unusual noises, or vibration.	✓	✓	✓
6.	Check all gauges (Pressure temperature and levels) for cleanliness and proper operation of needles. Change gauges or adjust temperature as needed.	✓	✓	✓
7.	Empty all tar buckets at end of shift, and report any full buckets found at start of shift.	✓	✓	✓
8.	Take all required samples (follow guide line sample sheet). Samples taken on 11-7 are: T-9, T-365A 1D; T-304 A, B, C, T-306C; P.45, P.452	yes	N/A	NA
9.	Check and drain gas main drains 2-times a turn during cold weather and log it once during warmer weather or as needed.	✓	✓	✓
10.	Check Tank (T-304A, B, C and T-306 C) for water each turn. Drain if needed.	✓	✓	✓
11.	Check all tanks on recycle for proper valve settings and operational mixers on for leaks and noises.	✓	✓	✓
12.	Work on assigned housekeeping area.	✓	✓	✓
13.	Make a personal report of general conditions for operator taking over shift (include any Maintenance or Contractor work going on etc., or any abnormal changes in operation)	✓	✓	✓
14	Check that all tar buckets have tar tags, fix the ones that don't have tags.	✓	✓	✓

* Bring this sheet to line up.

COMMENTS P.405A down for Mtce. No Heat in Pitch Plant. P.207C Pump Keeps Kicking out.

	Oil/Tar Initials	Mgr./TL Initials
11-7	RH *	DD
7-3	MB *	
3-11	TC *	

* by operator initial means that all listed items were done and management was informed of any problems / abnormalities.

Location: Doc Management

Date 10/18/06

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OIL TAR
DAILY CHECK-OFF LIST

		Check Each Turn		
		1ST	2ND	3RD
1.	Check and review past 2 turns operating log sheets for changes in Process or equipment conditions.	✓	✓	✓
2.	Walk through - Visually check area and equipment for any spill, leaks or equipment failure at start of turn (inside and outside from Pitch Plant to Distillation area).	✓	✓	✓
3.	Check all safety equipment and devices for proper set up (include eye wash stations and safety showers) Report any abnormal conditions.	✓	✓	✓
4	Report any spills or leaks made or found through out turn.	✓	✓	✓
5.	Check all pumps and turbines for proper lubrication, unusual noises, or vibration.	✓	✓	✓
6.	Check all gauges (Pressure temperature and levels) for cleanliness and proper operation of needles. Change gauges or adjust temperature as needed.	✓	✓	✓
7.	Empty all tar buckets at end of shift, and report any full buckets found at start of shift.	✓	✓	✓
8.	Take all required samples (follow guide line sample sheet). Samples taken on 11-7 are: T-P, T-363 D, T-304 A, B, C, T-306 C, T-415, P-452	yes	N/A	NA
9.	Check and drain gas main drains 2-times a turn during cold weather and log it once during warmer weather or as needed.	✓	✓	✓
10.	Check Tank (T-304A, B, C and T-306 C) for water each turn. Drain if needed.	✓	✓	✓
11.	Check all tanks on recycle for proper valve settings and operational mixers on for leaks and noises.	✓	✓	✓
12.	Work on assigned housekeeping area.	✓	✓	✓
13.	Make a personal report of general conditions for operator taking over shift (include any Maintenance or Contractor work going on etc., or any abnormal changes in operation)	✓	✓	✓
14	Check that all tar buckets have tar tags, fix the ones that don't have tags.	✓	✓	✓

* Bring this sheet to line up.

COMMENTS

	Oil/Tar Initials	Mgr./TL Initials
11-7	RH *	RL
7-3	EM *	
3-11	TC *	

* by operator initial means that all listed items were done and management was informed of any problems / abnormalities.

Location: Doc Management

Date 10-17-06

Rev. 1/20/05 13140121.frm

OIL TAR
DAILY CHECK-OFF LIST

		Check Each Turn		
		1ST	2ND	3RD
1.	Check and review past 2 turns operating log sheets for changes in Process or equipment conditions.	✓	✓	✓
2.	Walk through - Visually check area and equipment for any spill, leaks or equipment failure at start of turn (inside and outside from Pitch Plant to Distillation area).	✓	✓	✓
3.	Check all safety equipment and devices for proper set up (include eye wash stations and safety showers) Report any abnormal conditions.	✓	✓	✓
4	Report any spills or leaks made or found through out turn.	✓	✓	✓
5.	Check all pumps and turbines for proper lubrication, unusual noises, or vibration.	✓	✓	✓
6.	Check all gauges (Pressure temperature and levels) for cleanliness and proper operation of needles. Change gauges or adjust temperature as needed.	✓	✓	✓
7.	Empty all tar buckets at end of shift, and report any full buckets found at start of shift.	✓	✓	✓
8.	Take all required samples (follow guide line sample sheet). Samples taken on 11-7 are: T-9, T-303D; P.302(2); T-304A, B, C, T-306C; P.415; P.452	yes	N/A	N/A
9.	Check and drain gas main drains 2-times a turn during cold weather and log it once during warmer weather or as needed.	✓	✓	✓
10.	Check Tank (T-304A, B, C and T-306 C) for water each turn. Drain if needed.	✓	✓	✓
11.	Check all tanks on recycle for proper valve settings and operational mixers on for leaks and noises.	✓	✓	✓
12.	Work on assigned housekeeping area.	✓	✓	✓
13.	Make a personal report of general conditions for operator taking over shift (include any Maintenance or Contractor work going on etc., or any abnormal changes in operation)	✓	✓	✓
14	Check that all tar buckets have tar tags, fix the ones that don't have tags.	✓	✓	✓

* Bring this sheet to line up.

COMMENTS _____

	Oil/Tar Initials	Mgr./TL Initials
11-7	BH *	
7-3	EM *	
3-11	MB *	

* by operator initial means that all listed items were done and management was informed of any problems / abnormalities.

Location: Doc Management

DATE 10/31/06 TURN 7-3 OPERATOR E. Moore
MANAGER B. Mac

OIL AND TAR OPERATION LOG

1 Tar System is: On feed from T-304B → p-452 → T-9 (STOPPED)
2 Tanks with mixers are: 0
3 Tanks recycling are: T-9, T-363A&D
4 Preheater temps are: T-9 in ? out 94°
5 Loading trucks from: T-9, T-363A T-312 p-425 → T-311
6 Drained gas main
7 Went to line-up / cooler change
8 Switched feed to T-306C → p-452 → T-9
9 Shut chloride pump off (LEFT ON From 11-7 turn)
10 Draining water off T-304B @ 7th cock (STOPPED because Above
11 ground sump running over) Suction plugged on SP-304B.
12 Steaming to T-306C from p-204B
13 Pumping pitch stripper w/p-405A
14 Steaming / Bleeding on SP-304B (above ground Sump) Suction
15 Switched p-425B to p-425A (p-425B Seal is blown) down for mtce.
16
17
18
19
20

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF	T-331		
0	0	0	111	0	0	0	0	0

LEVELS			
T-9	72.82	311B	25.74
304A	21.22	312B	4.54
304B	68.94	331A	38.93
304C	53.70	363A	81.93
306C	74.87	363D	4.62

COILS			
304A	9	363A	0
304B	2	363D	0
304C	3	306C	7
T-9	7		

Location: Doc Management

Revised on 1/20/06
13140130.frm

DATE 10-31-04 TURN 11-7 OPERATOR TC
MANAGER DD

OIL AND TAR OPERATION LOG

1 Tar System is: on feed from T-306C → P-452 → T-9
2 Tanks with mixers are: —
3 Tanks recycling are: T-9, T-363 A+D
4 Preheater temps are: T-9 out 94
5 Loading trucks from: T-9, T-363A, T-312 P-425 → T-311
6 Drained Gas Mains
7 No Draining on tanks
8 Went to line-up. Helped with cooler change
9 Pumped Chloride Empty (2x) Still running
10 Took all required samples
11 Swept + mopped distillation floor South end
12 Swept centrifuge floor empty tar bucket + put coal fine do
13 Pumped centrifuge sump Empty
14 Cleaned P-Plant office
15 Flushing dehydrator with T-304B for 1 hr started 5:40A
16
17
18
19
20

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF			
11	0	0	1	0	0	0	0	0

LEVELS			
T-9	71	311B	23
304A	21	312B	17
304B	69	331A	39
304C	53	363A	82
306C	79	363D	5

COILS			
304A	9	363A	0
304B	2	363D	0
304C	3	306C	7
T-9	7		

Revised on 1/20/06
13140130.frm

Location: Doc Management

DATE 10/30/06 TURN 3-11 OPERATOR E. Moore
MANAGER Rex G.

OIL AND TAR OPERATION LOG

1 Tar System is: Oil fed from T-306C → p-452 → T-9
2 Tanks with mixers are: 0
3 Tanks recycling are: T-9, T-363A & D
4 Preheater temps are: T-9 in ? out 94°
5 Loading trucks from: T-9, T-363A, T-312 p-425 → T-311
6 Pumping T-304A → p-452 → T-306C (STOPPED)
7 Draining water off T-304B @ 6th cock (STOPPED)
8 Went to line-up/cooler change
9 Drained gas mains
10 Pumping pitch stripper w/p-405A
11 Filled fire globes in the area
12 Pumped chloride empty
13 Cleaned pitch plant office
14 Steaming T-304C from p-204B
15 Steaming T-304C from T-304C (front line)
16 Pumped oil into system
17
18
19
20 T-304C drain line leaking (DO NOT DRAIN TANK)?
P-405B is down — why?

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF	T-331		
0	0	0	0	0	0	0	0	0

LEVELS			
T-9	70	311B	20
304A	21	312B	21
304B	66	331A	39
304C	53	363A	84
306C	84	363D	4

COILS			
304A	9	363A	0
304B	2	363D	0
304C	3	306C	7
T-9	7		

Revised on 1/20/06
1314D130.frm

Location: Doc Management

DATE 10-30-06 TURN 7-3 OPERATOR MB/E.M.
MANAGER CEO

OIL AND TAR OPERATION LOG

1 Tar System is: ON Feed T-306C → P-452A → T-9
2 Tanks with mixers are: 0
3 Tanks recycling are: T-9, T-363 A & D
4 Preheater temps are: T-9 IN ? out 92°
5 Loading trucks from: T-9, T-363A, T-312 P-425 → T-311
6 Drained gas mains / check Area
7 Draining water on T-304B @ 6th cock
8 Pumping Pitch stripper w/405A
9 Pumped centrifuge sump empty
10 Steaming → T-306C from P-204B
11 Steaming → T-304C from T-304C (front line)
12 went to line up / cooler change
13 Took Resamples of T-9 & P-452
14 Loading PC Tar From North Loading dock
15 Pumped chloride empty (3xs)
16 Pumping T-304A → P-204B → T-306C
17
18
19
20

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T 9
363A	363D	311	312	CHEM	BF	T-331		
II	I	0	III	0	II	0	0	I

LEVELS			
T-9	68.84	311B	17.36
304A	27.06	312B	21.64
304B	62.78	331A	43.00
304C	53.92	363A	86.37
306C	78.24	363D	4.42

COILS			
304A	9	363A	0
304B	2	363D	0
304C	3	306C	7
T-9	7		

Revised on 1/20/06
Location: Doc Management 13140130.frm

DATE 10-30-06 TURN 11-7 OPERATOR MB
MANAGER BRIAN

OIL AND TAR OPERATION LOG

1 Tar System is: TW Feed T-306C → P-452A → T-9
2 Tanks with mixers are: Ø
3 Tanks recycling are: T-9, T-363 A & D
4 Preheater temps are: T-9 IN ? Out 92°
5 Loading trucks from: T-9, T-363 D, T-312 P-425 → T-311
6 Drained gas mains / check area
7 Draining water on T-304 B @ 6th cock
8 took Required samples
9 went to line up / cooler change
10 Steaming → T-306C from P-204B
11 Steaming → T-304C from T-304C (front line)
12 Pumped chloride empty
13 Pumped centrifuge sump empty
14 Pumping pitch stripper w/p-405A
15 Clean ~~office~~ Pitch Plant office
16 Picked up around distillation sump & skimmer tank
17
18
19
20 * T-304C drain line leaking (Don't drain tank)
* Both east & west containments Full

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF	T-331		
	11		11		11			

LEVELS			
T-9	68.55	311B	14.48
304A	27.64	312B	34.36
304B	61.98	331A	42.91
304C	52.36	363A	90.53
306C	83.13	363D	6.69

COILS			
304A	4	363A	0
304B	2	363D	0
304C	3	306C	7
T-9	3		

Location: Doc Management

Revised on 1/20/06
13140130.frm

DATE 10/29/06 TURN 3-11 OPERATOR E. Moore
MANAGER Rex G.

OIL AND TAR OPERATION LOG

1 Tar System is: Oil feed from T-306C → 452 → T-9
2 Tanks with mixers are: 0
3 Tanks recycling are: T-9, T-363A & D
4 Preheater temps are: T-9 in ? out 92°
5 Loading trucks from: T-9, T-363D, T-312 p-425 → T-311
6 Pumping T-3 → T-304A (started on 7-3 turn) Stopped on 3-11 turn
7 Pumping T-304A → p-204B → T-306C (Stopped @ 3:45pm
8 Drained gas mains
9 Went to line-up / cooler change
10 Pumped centrifuge sump
11 Draining water off T-304B @ 6th cock
12 Pumped chloride empty (?)
13 Steaming → T-306C from p-204B
14 Pumping pitch stripper w/ p-405A
15 Steaming → T-304C from T-304C (front line)
16 Pumping oil into system (started @ 8:12pm) STOPPED (BK)
17
18
19
* 20 T-304C drain line leaking (DO NOT DRAIN TANK)
* Please leave steam on discharge of chloride pump when done pumping. Discharge valve was found close & steam on going nowhere.

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF	T-331		
0	0	0	0	0	0	0	0	0

LEVELS			
T-9	67.64	311B	11.89
304A	27.62	312B	38.68
304B	62.71	331A	43.20
304C	52.38	363A	90.53
306C	88.45	363D	11.31

COILS			
304A	9	363A	0
304B	2	363D	0
304C	3	306C	7
T-9	7		

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Location: Doc Management

DATE 10-29-06 TURN 7-3 OPERATOR RHALL II
MANAGER

OIL AND TAR OPERATION LOG

1 Tar System is: On feed T-306C → p.452 → T-9
2 Tanks with mixers are: ~~T-363D~~
3 Tanks recycling are: T-9; T-363D
4 Preheater temps are: T-9 Out 82
5 Loading trucks from: T-9; T-363D, T-311 p.425 → T-312
6
7 Drained gas main
8 Went to line up; helped with cooler change
9 picked up on back road in between east & west
10 gas main
11 Switched light oil tanks p.425 → T-311 loading out
12 of T-312
13 picked up in p.302 area.
14 Checked off an inspection sheet for area.
15 pumping T-304A → p.304B → T-306C.
16 draining water on T-304B at the 5th (STOPPED)
17 no draining
18 picked up in back of light oil area (trash).
19
20
T-304C drain line is leaking where it was fixed before.

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF			
0	1	0	0	0	IIII	0	0	0

LEVELS			
T-9	60.76	311B	9.11
304A	27.27	312B	38.73
304B	57.73	331A	44.74
304C	52.99	363A	90.57
306C	83.64	363D	11.88

COILS			
304A	7	363A	0
304B	2	363D	0
304C	3	306C	7
T-9	7		

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Location: Doc Management

DATE 10-29-06 TURN 11-7 OPERATOR MB
MANAGER BKM

OIL AND TAR OPERATION LOG

1 Tar System is: ON Feed T-301C → P-452A → T-9.
2 Tanks with mixers are:
3 Tanks recycling are: T-9, T-363A & D
4 Preheater temps are: T9 IN ? Out 92°
5 Loading trucks from: T-9, T-363D, T-311 P-425 → T-312
6 Drained gas mains / checked area
7 took Required samples
8 Pumping pitch stripper w/ P405 A.
9 Draining water on T-304B @ 5th cock.
10 Went to line up / cooler change.
11 Pumped Chloride empty.
12 Pumped centrifuge sump empty
13 steaming → T-306C from P204B
14 Steaming → T-304C from T-304C (front line)
15 Picked up around light oil tanks & T-331
16 Cleaned Pitch Plant office.
17 Pick up wood in between loading docks. BKM
18
19
* (T-304C drain line is leaking) Can't drain tank. It has been Fiberglassed but still leaking.
* Both contanments full (East & West COG)

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF	T-331		
Ø	Ø	Ø	Ø	Ø	IIIII	Ø	Ø	Ø

LEVELS			
T-9	65.7	311B	5.7
304A	27	312B	39.3
304B	56.3	331A	44.6
304C	52.8	363A	90.5
306C	76.2	363D	13.1

COILS			
304A	9	363A	0
304B	2	363D	0
304C	3	306C	7
T-9	7		

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Location: Doc Management

DATE 10/28/06 TURN 3-11 OPERATOR E. Moore
MANAGER Rex G.

OIL AND TAR OPERATION LOG

1 Tar System is: Oil feed from T-306C ---> p-452 ---> T-9
2 Tanks with mixers are: Ø
3 Tanks recycling are: T-9, T-363A & D
4 Preheater temps are: T-9 in ? out 92
5 Loading trucks from: T-9, T-363D, T-311 p-425 ---> T-312
6 Drained gas mains
7 Went to line-up / cooler change
8 Pumped centrifuge sump
9 " " chloride empty
10 Draining water off T-304B @ 5th cock
11 Steaming ---> T-306C from p-204B
12 Steaming ---> T-304C from T-304C (front line)
13 Pumping pitch stripper w/ p-405A
14 Swept the centrifuge HCC room
15 Picked up trash in T-304A,B,C containment area
16 Cleaned pitch plant office (BKM)
17
18
19
* 20 (T-304C drain line is leaking) Cannot drain tank It has already been fiberglassed, but still leaking
* P-400 Weed leaks also

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF	T-331		
Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø	Ø

LEVELS			
T-9	65	311B	6
304A	27	312B	36
304B	57	331A	45
304C	52	363A	91
306C	83	363D	13

COILS			
304A	9	363A	0
304B	2	363D	0
304C	3	306C	7
T-9	7		

Location: Doc Management

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DATE 10/28/06 TURN 7-3 OPERATOR E. Moore
MANAGER D. Dabbs

OIL AND TAR OPERATION LOG

1 Tar System is: Oil feed from T-306C → p-452 → T-9
2 Tanks with mixers are: 0
3 Tanks recycling are: T-9, T-363A & D
4 Preheater temps are: T-9 in ? out 92
5 Loading trucks from: T-9, T-363D, T-311 p-425 → T-312
6 Pumping T-304A → p-204B → T-306C (STOPPED @ 9:45AM)
7 Went to line-up / cooler change
8 Drained gas mains
9 Put 1 steam coil on T-9 & opened up the steam on the
10 preheater (T-9 temp is low)
11 Draining water off T-304B @ 5th cock
12 Pumping pitch stripper w/ p-405A
13 Primary where steaming → T-301 going to T-304C (STOPPED on 11-7 tur
14 Steaming → T-306C from p-204B
15 Steaming → T-304C from T-304C (front line)
16 Cleaned pitch plant office
17
18
19
★ 20 (T-304C drain line is leaking) Cannot drain tank. It has already been fiberglassed, but still leaking

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF	T-331		
0	11	0	0	0	1111	0	0	111

LEVELS			
T-9	64	311B	6
304A	27	312B	33
304B	58	331A	45
304C	53	363A	91
306C	87	363D	13

COILS			
304A	9	363A	0
304B	2	363D	0
304C	3	306C	7
T-9	7		

Location: Doc Management

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DATE 10-28-06 TURN 11-7 OPERATOR MB
MANAGER Rex G

OIL AND TAR OPERATION LOG

1 Tar System is: ON Feed T-306C → p-452 → T-9
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9, T-363 A & D
4 Preheater temps are: T-9 out 92°
5 Loading trucks from: T-9, T-363D, T-311 p 425 → T-311
6 Drained gas mains / checked Area
7 Draining water on T-304B @ 5th cock.
8 took Required Samples
9 Steaming T-306C → p-204B through discharge line.
10 went to line up / cooker change.
11 Pumped chloride empty.
12 Pump centrifuge sump empty.
13 Pumping washoil into system from T-331 (started 2:30 Am stopped 5:00 Am.)
14 Picked up around loading docks.
15 Picked up white Buckets from in front of centrifuge.
16 Cleaned up Pitch Plant.
17 Pumping Pitch stripper w/405A.
18
19
20

* Primary steaming into 301 line going into T-304C.

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF	T-331		
Ø	11	Ø	Ø	Ø	11	Ø	Ø	Ø

LEVELS			
T-9	64.5	311B	5.7
304A	32.4	312B	30.5
304B	61.2	331A	44.7
304C	52.0	363A	90.5
306C	79.5	363D	17.3

COILS			
304A	9	363A	0
304B	2	363D	0
304C	3	306C	7
T-9	6		

Location: Doc Management

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DATE 10-27-06 TURN 3-11 OPERATOR RHall II
MANAGER D. Dapps

OIL AND TAR OPERATION LOG

1 Tar System is: On feed T-306C → p. 452 → T-9
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9, T-363A & D
4 Preheater temps are: T-9 out 92
5 Loading trucks from: T-9, T-363D, T-311 p. 425 → T-312
6
7 Drained gas main
8 Went to line up; helped with cooler change.
9 Primaries steaming into 301 line 90in
10 into T-304C. (Set up)
11 Pumped Centrifuges sump.
12 Pumped Chloride empty.
13 Draining water on T-304B at the 5th
14
15
16
17
18
19
20

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF			
0	0	0	0	0	0	0	0	0

LEVELS			
T-9	63	311B	5.74
304A	33	312B	28
304B	80?	331A	48.67
304C	57	363A	90.53
306C	85	363D	19.58

COILS			
304A	7	363A	0
304B	2	363D	0
304C	3	306C	7
T-9	6		

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Location: Doc Management

DATE 10-27-06 TURN 7-3 OPERATOR M.B/RH
MANAGER LEO M.

OIL AND TAR OPERATION LOG

1 Tar System is: ON Feed T-306C → P-452 A → T-9
2 Tanks with mixers are: T-363 D
3 Tanks recycling are: T-9, T-363 A & D.
4 Preheater temps are: T-9 IN out 92°
5 Loading trucks from: T-9, T-363D, T-311 P-425 → T-318
6 Drained gas mains / checked area.
7 Help Load wash oil → T-331
8 went to Line up. / cooler change.
9 Pumping centrifuge sump empty.
10 Pumping T-304A → P-204B → T-306C. (Stopped)
11 Pumped Chloride empty
12 Picked up trash in T-9 area.
13 Picked up trash on Chemical road.
14 Steam gain into T-306C → P-204B (discharge line)
15
16
17
18
19
20

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF	T-331		
	II				III	I		IIII

LEVELS			
T-9	63	311B	6
304A	26	312B	25
304B	61	331A	49
304C	53	363A	91
306C	90	363D	22

COILS			
304A	9	363A	0
304B	2	363D	0
304C	3	306C	7
T-9	6		

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DATE 10-27-06 TURN 11-7 OPERATOR M. B. MANAGER Kyle V.

OIL AND TAR OPERATION LOG

1 Tar System is: ON feed T-306C → P 452 → T-9
2 Tanks with mixers are: T-363 D
3 Tanks recycling are: T-9, T-363A & D
4 Preheater temps are: ——
5 Loading trucks from: T-9, T 363 D, T-311 P 425 → T-312
6 Painted gas mains / checked area
7 Took required Samples
8 went to line up. / cooler change.
9 Steam on P. 204 B → T-306C (Stopped)
10 Pumped centrifuge sump empty
11 Pumped Chloride ~~pump~~ empty
12 Picked up along Truck Assembly area to centrifuge Pump House
13 Clean Pitch Plant office.
14 Pumping Pitch stripper w/ 405A.
15
16
17
18
19
20 Need light oil sample Bottles & caps and need sample cans caps.

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BT	T-331		
Ø	III	Ø	Ø	Ø	II	Ø	Ø	Ø

LEVELS			
T-9	64.3	311B	5.6
304A	34.7	312B	22.3
304B	59.5	331A	33.3
304C	51.9	363A	90.5
306C	74.6	363D	30.7

COILS			
304A	9	363A	0
304B	2	363D	0
304C	3	306C	7
T-9	6		

Location: Doc Management

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DATE 10-26-06 TURN 3-11 OPERATOR Ryan II
MANAGER Brian R

OIL AND TAR OPERATION LOG

1 Tar System is: On feed T-306C → p.450 → T-9
2 Tanks with mixers are: T-363 D
3 Tanks recycling are: T-9, T-363 A & D
4 Preheater temps are:
5 Loading trucks from: T-9, T-363 D T-312 p.425 → T-312
6
7 Primed gas on am
8 Cut to line up, helped with cooler change.
9 Switched light oil back: p.425 → T-312 loading T-311
10 p.405 B back online (working)
11 Turned on two valves on primary's
12 Steamed discharge on phenol pump.
13 Pumped Chloride Empty
14 Pumped Centrifuge Sump.
15 Picked up trash in front of Centrifuge.
16 Picked up trash in or along Chemical road.
17 Cleaned pitch plant.
18 Dumped Decanter
19 Pumped oil in Spider 5:45 → 10:00
20 No draining on tanks.

Need heater in pitch plant.

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF	331		
	1							

LEVELS			
T-9	63.35	311B	5.71
304A	34.75	312B	19.63
304B	55.92	331A	34.26
304C	51.97	363A	90.53
306C	80.44	363D	35.70

COILS			
304A	9	363A	0
304B	2	363D	0
304C	3	306C	7
T-9	6		

Location: Doc Management

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DATE 10-26-06 TURN 7-3 OPERATOR MB/RH
MANAGER [illegible]

OIL AND TAR OPERATION LOG

1 Tar System is: ON feed T-306C → P45.2A → T-9
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9, T-363A & D
4 Preheater temps are: ———
5 Loading trucks from: T-9, T-363D, T-311 P-425 → T-312
6 Drained gas mains / checked Area
7 Draining water on T-304B @ 5th cock (stopped)
8 Went to line up / cooler change.
9 Pumping Pitch stripper w/ 405A
10 MTCE working on 405B.
11 Pumping T-304A → 204B → T-306C
12 Pumped Centrifuge sump empty
13 Loaded AKJ truck into T-304A
14 Steamed out phenol pump.
15 Steamed on P. 204B → T-306C
16 Switched light oil ~~to~~ T-311 → to Loading out of T-312
17 425 →
18
19
20

Need Heat in Pitch Plant.

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF			
	|	||	||		||||			||||

LEVELS			
T-9	62.32	311B	5.52
304A	34.73	312B	17.70
304B	54.63	331A	39
304C	51.58	363A	90.55
306C	86.35	363D	37.68

COILS			
304A	9	363A	0
304B	2	363D	0
304C	3	306C	7
T-9	6		

Location: Doc Management

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DATE 10-26-06 TURN 11-7 OPERATOR MB
MANAGER Kyle V.

OIL AND TAR OPERATION LOG

1 Tar System is: ON Feed T-306C → p452A → T-9
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9, T-363 A & D
4 Preheater temps are: ——
5 Loading trucks from: T-9, T-363D, T-311 p425 → T-312.
6 Drained gas mains / checked Aem.
7 Draining water on T-304B @ 5th cock
8 Steam on p204B → T-306C (stopped)
9 Pumped centrifuge sump empty
10 Took Required Samples.
11 Pumped Chloride empty.
12 went to line up / Cooler Change
13 Empty out Tar Buckets used IN Samples
14 Cleaned up the mess front end oil drive left.
15 Cleaned Pitch Plant office.
16
17
18
19
20 No Power IN Pitch Plant
Need Heater IN Pitch Plant.

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF	T-331		
Ø	1	11	Ø	Ø	11	Ø	Ø	Ø

LEVELS			
T-9	63	311B	9.3
304A	41.1	312B	24.4
304B	53.8	331A	39.
304C	51.7	363A	90
306C	77.7	363D	39.9

COILS			
304A	9	363A	0
304B	2	363D	0
304C	3	306C	7
T-9	6		

Location: Doc Management

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DATE 10-25-06 TURN 3-11 OPERATOR RHall II
MANAGER [illegible]

OIL AND TAR OPERATION LOG

1 Tar System is: On feed T-306C → p. 452 → T-9
2 Tanks with mixers are: T-363 D
3 Tanks recycling are: T-9, T-363 A & D
4 Preheater temps are: —
5 Loading trucks from: T-9, T-363 D, T-311 p. 425 → T-312
6
7 Drained gas main
8 Went to line up, helped with cooler change.
9 draining water on T-304B at the 5th
10 Picked up trash on back trail in between east & [illegible]
11 Steam on gas main.
12 p. 204B discharge line goin to T-306C.
13 Cleaned Pitch Plant.
14 Pumping front end oil in T-304A.
15
16
17
18
19
20

No Power IN Pitch Plant.
Need heater in Pitch Plant!!

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF			
	1	1						

LEVELS			
T-9	62.05	311B	17.83
304A	30.94	312B	21.71
304B	52.92	331A	38.93
304C	51.59	363A	90.55
306C	85.84	363D	42.08

COILS			
304A	9	363A	0
304B	2	363D	0
304C	3	306C	7
T-9	6		

Location: Doc Management

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DATE 10-25-06 TURN 7-3 OPERATOR TC
MANAGER DD

OIL AND TAR OPERATION LOG

1 Tar System is: on feed from T-306C → P-452 → T-9
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9, T-363A & D
4 Preheater temps are:
5 Loading trucks from: T-9, T-363D, T-311 P-425 → T-312
6 Drained Gas mains
7 Draining water on T-304C at the 3rd test cock
8 Went to Line-up, Helped with cooler change
9 Pumped chloride drum Empty
10 pumped T-304A → T-306C 10:00A
11 Swept P-Plant mer room
12 Picked up trash around dehydrator
13 Cleaned P-Plant office (BJR)
14
15
16
17
18
19
20

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF			
0	1	IIII	0	0	4	0	0	IIII

LEVELS			
T-9	61	311B	22
304A	37	312B	20
304B	54	331A	42
304C	53	363A	91
306C	79	363D	44

COILS			
304A	9	363A	0
304B	2	363D	0
304C	3	306C	7
T-9	6		

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DATE 10-25-06 TURN 11-7 OPERATOR TC
MANAGER DD

OIL AND TAR OPERATION LOG

1 Tar System is: on feed from T-304C - P-452 -> T-9
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9, T-363A & D
4 Preheater temps are: ----
5 Loading trucks from: T-9, T-363D, T-311 P-425 -> T-312
6 Drained Headmains
7 Draining water on T-304C at 3rd cock
8 Went to Line-up, Help with cooler change
9 Pumped Centrifuge sump Empty
10 Took all required samples
11 pumped Pitch stripper Empty with P-405
12 Swept Tar centrifuge MCC room &
13 Tar centrifuge Pump House
14 Picked up trash along Chemical road
15
16
17
18
19
20

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF			
0	111	1	0	0	11	0	6	0

LEVELS			
T-9	61	311B	35
304A	41	312B	18
304B	52	331A	48
304C	52	363A	91
306C	79	363D	46

COILS			
304A	9	363A	0
304B	2	363D	0
304C	3	306C	7
T-9	6		

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DATE 10-27-06 TURN 3-11 OPERATOR Rothall II
MANAGER Brian

OIL AND TAR OPERATION LOG

1 Tar System is: On feed T-306C → p452 → T-9
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9; T-363 A & D
4 Preheater temps are:
5 Loading trucks from: T-9; T-363 D; T-311 p. 425 → T-312
6
7 Drained gas drum
8 Went to line ups; helped with coolers C'
9 Pumped Chloride
10 Flushed dehydrator with P.C. for T-304B
11 Pumping pitch stripper with 405 A
12 T-304C draining at the 3rd.
13
14
15
16
17
18
19
20

Pump 405 A leaking (reminder)

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF			

LEVELS			
T-9	60.22	311B	39.07
304A	41.47	312B	15.12
304B	48.33	331A	41.66
304C	57.06	363A	92.65
306C	87.67	363D	45.96

COILS			
304A	9	363A	0
304B	2	363D	0
304C	3	306C	7
T-9	6		

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Location: Doc Management

DATE 10-24-06 TURN 7-3 OPERATOR TC
MANAGER DD

OIL AND TAR OPERATION LOG

1 Tar System is: on feed from T-306C -> P-452 -> T-9
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9, T-363A+D
4 Preheater temps are: —
5 Loading trucks from: T-9, T-363D, T-311 P-425 -> T-312
6 Drained Gas Mains
7 Draining [redacted] water on T-306C at the 5th Stopped
8 went to Line-up, Helped with Cooler Change
9 Pumps P-405A+B Down for Maint
10 Pumped centrifuge sump Empty
11 Unplugged T-304C at the drain box
12 Flushed dehydrator with T-304B
13 Pumped Pitch stripper Empty with P-405B
14 Draining water on T-306C at the 4th test Cock
15 Draining water on T-304C at the 3rd test cock
16
17
18
19
20

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF			
0	11	11	0	0	111111	0	0	1111

LEVELS			
T-9	59	311B	47
304A	49	312B	12
304B	48	331A	42
304C	54	363A	91
306C	76	363D	50

COILS			
304A	9	363A	0
304B	2	363D	0
304C	3	306C	7
T-9	6		

Location: Doc Management

Revised on 1/20/06
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DATE 10-24-06 TURN 11-7 OPERATOR R Hall II
MANAGER Brian

OIL AND TAR OPERATION LOG

1 Tar System is: On feed T-306C → p.452 → T-9
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9, T-363 A&D
4 Preheater temps are:
5 Loading trucks from: T-9, T-363D; T-311 p.425 → T-312
6
7 Drained gas main
8 Went to line up; helped with Cooler Change.
9 Pumped Centrifuge Sump
10 picked up around West gas main
11 took required samples.
12 picked up along Chemical road (trash)
13 Pumped Chloride empty.
14 Steaming discharge & suction on T-304B sump. (5
15 T-304B sump pump is pumping.
16 Cleaned pitch plant.
17
18
19
20

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF			
0	0	1	0	0	1	0	0	0

LEVELS			
T-9	59.58	311B	60.34
304A	90.71	312B	8.74
304B	44.81	331A	41.59
304C	53.60	363A	90.65
306C	83.30	363D	54.55

COILS			
304A	9	363A	0
304B	2	363D	0
304C	3	306C	7
T-9	6		

Location: Doc Management

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DATE 10-23-06 TURN 3-11 OPERATOR RHall MANAGER Brian

OIL AND TAR OPERATION LOG

1 Tar System is: On feed T-306C - p.452 → T-9
2 Tanks with mixers are: T-363 D
3 Tanks recycling are: T-363 A & D
4 Preheater temps are:
5 Loading trucks from: T-9, T-363D, T-311 p.425 → T-312
6
7 Drained gas main
8 Went to line up, helped with Codes Change
9 Pumping T-304A → p.304B → T-306C. (Stopped
10 Steamed discharge and suction on T-304B sump.
11 Steam on discharge → 304B gain T-306C.
12 Picked up tar in centrifuge.
13 Cleaned pitch plant.
14
15
16
17
18
19
20

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF			
0	0	0	0	0	1	0	0	0

LEVELS			
T-9	58.75	311B	64.62
304A	34.99	312B	59.3
304B	41.54	331A	43
304C	53.38	363A	90.65
306C	91.72	363D	56.90

COILS			
304A	9	363A	0
304B	2	363D	0
304C	3	306C	7
T-9	6		

Location: Doc Management

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DATE 10-23-06 TURN 7-3 OPERATOR MB
MANAGER C. Jones

OIL AND TAR OPERATION LOG

1 Tar System is: ON Feed T-306C → p452A → T-9
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9, T363A & D
4 Preheater temps are: —
5 Loading trucks from: T-9, T-363D, T-312. p-425 → T-311
6 Drained gas mains / checked Area.
7 steam from T-304C → T-304C through Front line lupstairs
8 went to line up / cooler change.
9 Took T-9 tar sample again.
10 Pumping water out of T-311 → p309 (stopped)
11 Pumping Pitch stripper w/p405B.
12 Pumped chloride empty.
13 Pumped centrifuge sump empty.
14 Switch light oil tank T-312 → T-311.
15 Pumping 425 → T-312.
16 Pick up along the 60 ft & 40 ft
17 Cleaned up Pitch Plant office. (BKM)
18
19
20

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF	T-331		
Ø	|	Ø	||	Ø	||||	Ø	Ø	||||

LEVELS			
T-9	57.8	311B	64.5
304A	44.4	312B	3.3
304B	38.8	331A	43.0
304C	53.7	363A	90.5
306C	77.2	363D	56.8

COILS			
304A	9	363A	0
304B	2	363D	0
304C	3	306C	7
T-9	6		

Location: Doc Management

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DATE 10-23-06 TURN 11-7 OPERATOR MB
MANAGER K.V.

OIL AND TAR OPERATION LOG

1 Tar System is: ON Warm Recycle. Stopped.
2 Tanks with mixers are: T-363 D
3 Tanks recycling are: T-9, T-363 A & D
4 Preheater temps are: —
5 Loading trucks from: T-9 T-363D, T-312 P-425 → T-311
6 Drained gas mains / Checked area.
7 took Required samples.
8 Went to line up / cooler Change.
9 Pumped Chloride empty.
10 Pumped Centrifuge sump empty
11 Pumping T-306C → P 452 A → T-9
12 Clean Drain Plant office
13 Steam from T-306C → T-304C through Front Line
14
15
16
17
18
19
20 * Need some Bucket for centrifuge.
* Some more Heat

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF	T-331		
Ø	III	Ø	I	Ø	II	Ø	Ø	Ø

LEVELS			
T-9	59	311B	63.8
304A	44.3	312B	11.8
304B	34.8	331A	42.9
304C	53.6	363A	90.6
306C	86.2	363D	50.3

COILS			
304A	9	363A	0
304B	2	363D	0
304C	3	306C	9
T-9	6		

Location: Doc-Management

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DATE 10-22-06 TURN 3-11 OPERATOR TC
MANAGER DD

OIL AND TAR OPERATION LOG

1 Tar System is: on Warm Recycle
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9, T-363A+D
4 Preheater temps are: —
5 Loading trucks from: T-9, T-363D, T-312 P-425 → T-311
6 Drained Gas main
7 no Draining. Steam on T-304C at drain box
8 Went to Line up, Helped with cooler change
9 working on un-plugging chloride discharge
10 and suction are plugged
11 Steam coming from T-304C through front line
12 to up stair centrifuge T-304C
13 Stopped pumping T-304A to T-306C. Steam
14 on Discharge going to T-304C
15 change out steam & bleed on chloride & put
16 new gauge on it
17 chloride now open discharge & suction
18 Steam on (KW)
19
20

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF			
0	1	0	11	0	0	0	0	0

LEVELS			
T-9	58	311B	61
304A	44	312B	16
304B	32	331A	43
304C	53	363A	91
306C	90	363D	64

COILS			
304A	9	363A	0
304B	2	363D	0
304C	3	306C	7
T-9	6		

Location: Doc Management

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DATE 10-22-06 TURN 7-3 OPERATOR M/B
MANAGER Leo

OIL AND TAR OPERATION LOG

1 Tar System is: ON Warm Recycle
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9, T-363 A & D
4 Preheater temps are: —
5 Loading trucks from: T-9, T-363D, T-312 p425 → T-311
6 Drained gas mains / check Area.
7 Pumping T-304B → 207B → T-304C (Stopped)
8 Pumped Centrifuge sump empty.
9 Went to line up / cooler change.
10 Pumping T-304A → p204B → T-306C
11 Steam coming from T-304C → 427 through front line
12 Steam from T-207B → T-304C
13 Clean Pitch Plant office.
14 Steam going through chloride discharge. (Line might be plugged)
15
16
17
18
19
20 * Need Heater in Pitch Plant.

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF			
Ø		Ø	Ø	Ø		Ø	Ø	

LEVELS			
T-9	58.61	311B	58.32
304A	50.09	312B	24.69
304B	31.21	331A	42.95
304C	52.84	363A	90.55
306C	75.41	363D	66.01

COILS			
304A	9	363A	0
304B	2	363D	0
304C	3	306C	7
T-9	6		

Location: Doc.Management

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DATE 10-22-06 TURN 11-7 OPERATOR TC
MANAGER

OIL AND TAR OPERATION LOG

1 Tar System is: on feed from T-306C -> P-452 -> T-9 (Stopped)
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9, T-363 A+D
4 Preheater temps are: ~
5 Loading trucks from: T-9, T-363D, T-312 P-425 -> T-311
6 Drained Gas mains
7 Draining Water on T-304B at the 5th
8 Went to line-up Helped with cooler change
9 flushing dehydrator T-304B -> P-452 -> T-9 line Stopped
10 Took all required samples
11 Swept down centrifuge floor
12 Steam leak on piping on side of East gas main
13 need new heater for P-Plant
14 pumping T-304B -> P-307B -> T-304C take to 90% 3:15A
15 or until T-304B is empty
16 Steam coming from T-304C front line to the 427
17 Tar system on Warm Recycle
18
19
20

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF			
0	0	0	0	0	1	0	0	0

LEVELS			
T-9	60	311B	55
304A	52	312B	24
304B	57	331A	42
304C	39	363A	90
306C	69	363D	67

COILS			
304A	9	363A	0
304B	2	363D	0
304C	3	306C	7
T-9	6		

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DATE 10-21-06 TURN 3-11 OPERATOR TC
MANAGER DD

OIL AND TAR OPERATION LOG

1 Tar System is: on feed from T-306C -> P-452 -> T-9
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9, T-363A & D
4 Preheater temps are: ---
5 Loading trucks from: T-9, T-363D, T-312 P-425 -> T-311
6 Drained Gas mains
7 Draining water on T-304B at the 5th lock
8 Went to line-up, Helped with cooler change
9 Put up safety sign in area
10 Cleaned trash up on 40 & 60 foot level
11 Swept mcc room next to P-Plant
12 pick up trash along chemical road
13 Empty trash outside of P-Plant
14 Cleaned P-Plant office
15 Pump centrifuge sump Empty
16
17
18
19
20

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF			
0	0	0	0	0	0	0	0	0

LEVELS			
T-9	60	311B	53
304A	47	312B	25
304B	67	331A	43
304C	36	363A	91
306C	71	363D	68

COILS			
304A	9	363A	0
304B	2	363D	0
304C	3	306C	7
T-9	6		

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Location: Doc Management

DATE 10-21-06 TURN 7-3 OPERATOR M. Banuelos
MANAGER BRIAN

OIL AND TAR OPERATION LOG

1 Tar System is: ON feed T-306C → P-452 → T-9 (Stopped)
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9, T-363 A & D
4 Preheater temps are: ———
5 Loading trucks from: T-9, T-363D, T-312.
6 Drained gas main / checked area
7 Draining water on T-304B @ 6th cock (Stopped)
8 Pumped centrifuge sump.
9 Pumping Pitch stripper w/p 405 B
10 Pumping T-304B → p452 → T-9 (stopped at 12:15)
11 went to line up / cooler change
*12 Put another steam coil on T-9 (6 coils on)
*13 Picked up & Put away Fire Hose away from T-9.
*14 Picked up old steam hose in [redacted] T-9 containment & Piled it in the southwest corn
15 Switched feed Bank to T-306C → p452 → T-9
16 Filled oil globes for the Phenol Pump & South Chloride Pump.
17 Pumped Chloride empty
18 Cleaned Pitch Plant Office.
19
20

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHLM	BF	T-331		
Ø	///	Ø	Ø	Ø	///	Ø	Ø	////

LEVELS			
T-9	59	311B	50
304A	43	312B	24
304B	65	331A	42
304C	36	363A	90
306C	75	363D	70

COILS			
304A	9	363A	0
304B	2	363D	0
304C	3	306C	7
T-9	6		

Location: Doc Management

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DATE 10-20-06 TURN 3-11 OPERATOR M. Brandes
MANAGER OD

OIL AND TAR OPERATION LOG

1 Tar System is: Oil Feed 306C → 0452 → T-9
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9, T-363 A & D
4 Preheater temps are: ——
5 Loading trucks from: T-9, T-363D, T-312 p. 425 → T-311.
6 Drained gas mains / checked Area.
7 Draining water on T-304B @ 6th cock
8 Pumping T-3 → T-304A
9 Pumping T-304A → 204B → T-306C (stopped)
10 Went to line up / cooler change.
11 Pumped Centrifuge sump.
12 Pumped decide empty.
13 Pumping Pitch Stripper w/ 0405 B
14 Cleaned Pitch Plant office.
15
16
17
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19
20

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF	T-331		
Ø	1	Ø	Ø	Ø	Ø	Ø	Ø	Ø

LEVELS			
T-9	59.93	311B	44.88
304A	37.83	312B	24.69
304B	67.99	331A	51.23
304C	36.02	363A	90.60
306C	79.02	363D	81.05

COILS			
304A	9	363A	0
304B	2	363D	0
304C	3	306C	7
T-9	5		

Location: Doc Management

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DATE 10-20-06 TURN 7-3 OPERATOR M. Barnelos.
MANAGER Leo M

OIL AND TAR OPERATION LOG

1 Tar System is: ON feed T-306C → p452 → T-9.
2 Tanks with mixers are: T-363 D.
3 Tanks recycling are: T-9, T-363 A & D
4 Preheater temps are: ——
5 Loading trucks from: T-9, T-363D, T-312 p. 425 → T-311.
6 Drained gas mains / check Area.
7 Draining water on T-304B @ 6th cock.
8 Pumped ~~etc~~ chloride empty
9 went to line up / cooler change
10 Pumping T-304A → p204B → T-306C
11 Pumped centrifuge sump empty
12 Pumped AKJ truck IN to T-306C
13 Cleaned up in front of Centrifuge.
14 Cleaned Pitch Plant office.
15 Pumping ~~[illegible]~~ T-3 → T-304A.
16
17
18
19
20 * Both East & west containments full.

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF			
Ø	II	Ø	Ø	Ø	II	Ø	Ø	IIII

LEVELS			
T-9	59.3	311B	42.5
304A	36	312B	24.6
304B	66.1	331A	51.2
304C	36.6	363A	90.6
306C	74.9	363D	83.2

COILS			
304A	9	363A	0
304B	2	363D	0
304C	3	306C	7
T-9	5		

Location: Doc Management

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DATE 10-20-06 TURN 11-7 OPERATOR [illegible] MANAGER [illegible]

OIL AND TAR OPERATION LOG

1 Tar System is: On feed T-306C → p. 452 → T-9
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9, T-363 A1D
4 Preheater temps are:
5 Loading trucks from: T-9, T-363D, T-312 p. 425 → T-311
6
7 Drained gas main
8 Went to line up; helped with cooler change.
9 took required samples.
10 pumped pitch stripper with 405 B pump.
11 picked up trash at east gas main / inside of
12 dehydrator.
13 washed down distillation floor at 405 pump
14 picked up trash in back of pitch plant.
15 Cleaned pitch plant.
16 Pumped centrifuge sump.
17
18
19
20

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF			
0	0	0	0	0	1	0	0	0

LEVELS			
T-9	60.61	311B	39.46
304A	28.62	312B	24.66
304B	65.30	331A	51.14
304C	35.26	363A	90.57
306C	78	363D	87.57

COILS			
304A	9	363A	0
304B	2	363D	0
304C	3	306C	7
T-9	5		

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Location: Doc Management

DATE 10-19-06 TURN 3-11 OPERATOR T. Cargle
MANAGER DD

OIL AND TAR OPERATION LOG

(Slopp

1 Tar System is: on feed from T-304C → P-452 → T-363D
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9, T-363A + D
4 Preheater temps are: — T-304C in 98 out 120
5 Loading trucks from: T-9, T-363D, T-312 P-425 → T-311
6 Drained Gas mains
7 Draining water on T-304B at 6th cock
8 A.K.J truck pumped tar into T-304A
9 change feed to T-306C → P-452 - T-9
10 Steaming front line of T-304C → T-304C upstair centrifug
11 picked up trash by T-304A, B + C tanks
12 Swept down distillation floor
13 Need heater fixed in P-Plant
14 Cleaned P-Plant office (DLD)
15
16
17
18
19
20

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF			
0	0	0	11	0	0	0	0	0

LEVELS			
T-9	59	311B	36
304A	26	312B	25
304B	66	331A	52
304C	36	363A	91
306C	86	363D	89

COILS			
304A	9	363A	0
304B	2	363D	0
304C	3	306C	7
T-9	5		

Location: Doc Management

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DATE 10-19-06. TURN 87-3 OPERATOR M Bauwelen
MANAGER LEO

OIL AND TAR OPERATION LOG

1 Tar System is: One feed from T-304C → P.452 → T-363D
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9, T.363 A & D.
4 Preheater temps are: T-304C in 98° out 130°
5 Loading trucks from: T-9, T-363D, T-312. p.425 → T-311
6 Drained gas mains/checked area.
7 Draining water on T-304B @ 6th cock. (stopped)
8 went to line up/cooler change.
9 Switched p405A to p405B.
10 P.405A down for Mtce
11 Pumped chloride pump empty.
12 Pumped centrifuge sump empty.
13 Pumping skimmer tank to A Demucker
14 Steamed out Phenol Pump
15 Steaming into T-304A for AKJ truck.
16 Cleaned Pitch plant office.
17
18
19
20

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF			
Ø	Ø	Ø	Ø	Ø	11	Ø	Ø	1111

LEVELS			
T-9	59.1	311B	33
304A	24.3	312B	33.1
304B	66	331A	51.9
304C	37	363A	90.5
306C	90.1	363D	83.5

COILS			
304A	9	363A	0
304B	2	363D	0
304C	3	306C	2
T-9	5		

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Location: Doc Management

DATE 10-19-06 TURN 11-7 OPERATOR RHall II
MANAGER BD

OIL AND TAR OPERATION LOG

1 Tar System is: On feed T-304C → p.452 → T-363A
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9; T-363A & D
4 Preheater temps are: T-304C in 98 out 13
5 Loading trucks from: T-9; T-363D; T-312 p.425 → T-31
6
7 Drained gas main
8 Went to line up; helped with cooler change.
9 Pumped Chloride empty.
10 Pumped centrifuge empty. (sump)
11 Draining water on T-304B at the 6th
12 took samples.
13 Picked up trash in front of centrifuge en-
14 trance.
15 mopped distillation floor. (north side)
16 Cleaned pitch plant.
17 Switched feed from T-363A back to T-363D
18 On feed from T-304C → p.452 → T-363D
19
20

Heater went out again (needs looking at)

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF			
0	0	0	1	0	0	0	0	0

LEVELS			
T-9	61.73	311B	30.40
304A	29.35	312B	31.19
304B	63.66	331A	51.89
304C	40.34	363A	90.53
306C	90.16	363D	68.79

COILS			
304A	9	363A	0
304B	2	363D	0
304C	3	306C	7
T-9	5		

Location: Doc Management

DATE 10-18-06 TURN 3-11 OPERATOR TC
MANAGER DD

OIL AND TAR OPERATION LOG

1 Tar System is: on feed from T-304C → P-452 → T-363A
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9, T-363A+D
4 Preheater temps are: T-304C in 98 out 130
5 Loading trucks from: T-9, T-363D, T-312 P-425 → T-311
6 Drained Gas Mains
7 Water Draining on T-304B at the 6th Cock (Stopped)
8 Went to line-up. Helped with cooler change
9 Pumped centrifuge sump Empty
10 Cleaned Gauge on T-304C on Top of preheater
11 Sweept centrifuge floor, Empty tar buckets
12 Checked + filled oil holes in area
13 Picked up trash on the side of distillation
14 Put Heater to start working
15 Cleaned P-Plant office
16
17
18
19
20

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF			
0	111	0	0	0	0	0	0	0

LEVELS			
T-9	62	311B	28
304A	24	312B	37
304B	63	331A	52
304C	49	363A	82
306C	90	363D	66

COILS			
304A	9	363A	0
304B	2	363D	0
304C	3	306C	7
T-9	5		

Location: Doc Management

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DATE 10/18/06 TURN 7-3 OPERATOR E. Moore
MANAGER Leo Mc

OIL AND TAR OPERATION LOG

1 Tar System is: Oil fed from T-304C → P-452 → T-363A
2 Tanks with mixers are: T-363D
3 Tanks recycling are: F9, T-363D+A
4 Preheater temps are: ———
5 Loading trucks from: T-9, T-363D, T-312 P-425 → T-311
6 Drained gas mains
7 Went to line-up / Cooler Change
8 Draining water off T-304C @ 2nd cock. (STOPPED)
9 Pumping distillation sump → skimmer tank (STOPPED)
10 Pumped centrifuge sump
11 Put T-363A on recycle
12 Put T-331 pump on (flooded) (STOPPED)
13 Put pressure gauge on chloride pump
14 Draining T-304B @ 6th cock
15 Checked T-306C @ 8th gas, 7th tar.
16
17
18
19
20

T-312 pump doesn't work
P-405A leaking

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF	T-331		
0	1	0	0	0	1	0	0	1111

LEVELS			
T-9	62.1	311B	24.9
304A	24.3	312B	37.5
304B	59.2	331A	57.7
304C	47.5	363A	68.0
306C	90.1	363D	70.9

COILS			
304A	9	363A	0
304B	3	363D	0
304C	3	306C	7
T-9	5		

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13140130.frm

Location: Doc Management

DATE: 10-18-06 TURN 11-7 OPERATOR PHILLIP
MANAGER Brian

OIL AND TAR OPERATION LOG

1 Tar System is: On-feed T-304C → p.452 → T-363A
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-363D; T-9
4 Preheater temps are:
5 Loading trucks from: T-9; T-363D; T-312 p.425 → T-311
6
7 Drained gas main
8 Went to line up, helped with coder change.
9 took samples.
10 Picked up around East gas main
11 Distillation sump pumping into skimmer tank.
12 T-311; T-312 sumps on
13 draining water on T-304C at the 3rd
14 Cleaned pitch plant.
15 draining water on T-304C at the 2nd
16
17
18
19
20

Heater in Pitch plant needs looking at.
(cold in Pitch Plant).

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF			
0	1111	0	0	0	111	0	0	0

LEVELS			
T-9	64.22	311B	22.32
304A	27.35	312B	37.66
304B	58.44	331A	57.75
304C	51.87	363A	54.48
306C	80.16	363D	74.70

COILS			
304A	9	363A	0
304B	0	363D	0
304C	3	306C	7
T-9	5		

Revised on 1/20/06
13140130.frm

Location: Doc Management

DATE 10-17-06 TURN 3-11 OPERATOR M. Bañuelos
MANAGER

OIL AND TAR OPERATION LOG

1 Tar System is: On feed from T-304C → p 452 → T363A
2 Tanks with mixers are: T-363A
3 Tanks recycling are: T9, T-363A.
4 Preheater temps are: —
5 Loading trucks from: T9, T363A, T-312 p425 → T-311
6 Drained gas mains / cheaked area
7 Draining water off T-304C @ 4th cock.
8 Pumped centrifuge sump empty.
9 Pumping distillation sump → skimmer tank
10 Steam on suction of p-204C → T-304A (stopped)
11 Went to line up / cooler change.
12 Pumping T-311 sump T-312 sump.
13 Pumped chloride empty.
14 Picked up trash By around loading docks & AKT Pad, & chemical.
15 Clean Pitch Plant Office.
16
17
18
19
20

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF	T-331		
Ø	Ø	Ø	11	Ø	Ø	Ø	Ø	Ø

LEVELS			
T-9	64.27	311B	19.32
304A	24.35	312B	37.73
304B	55.97	331A	57.73
304C	55.87	363A	40.68
306C	90.16	363D	81.59

COILS			
304A	9	363A	0
304B	2	363D	0
304C	3	306C	7
T-9	5		

Location: Doc Management

Revised on 1/20/06
13140130.frm

DATE 10/17/06 TURN 7-3 OPERATOR E. Hoore
MANAGER Leo M

OIL AND TAR OPERATION LOG

1 Tar System is: On feed from T-304C → p-452 → T-363A
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9, T-363D
4 Preheater temps are: ——
5 Loading trucks from: T-9, T-363D, T-312 p-425 → T-311
6 Went to line-up / cooler change
7 Drained gas mains
8 Draining water off T-304C @ 4th cock
9 Put T-311 pump, T-312 pump, & T-331 pump on
10 Pumped chloride empty
11 Pumping pitch stripper w/ p-405A
12 Pumping distillation pump → skimmer tank
13 Turned T-331 pump off
14 AKJ loaded truck from T-363D loading dock → T-304A
15 Steam on suction of p-204C → T-304A
16
17
18
19
20

PC		LIGHT OIL		FRONT END OIL		WASH OIL T-331		T-9
363A	363D	311	312	CHEM	BF			
0	11	0	11	0	111	0	0	1111

LEVELS			
T-9	4	311B	16
304A	23	312B	46
304B	51	331A	57
304C	59	363A	27
306C	90	363D	81

COILS			
304A	9	363A	0
304B	2	363D	0
304C	3	306C	7
T-9	5		

Location: Doc Management

Revised on 1/20/06
13140130.frm

DATE 10-17-06 TURN 11-7 OPERATOR Rhall II
MANAGER Kyle

OIL AND TAR OPERATION LOG

1 Tar System is: T-304C → p.452 → T-363D
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9; T-363D
4 Preheater temps are:
5 Loading trucks from: T-9; T-363D; T-312 p.455 → T-311
6
7 Drained gas main.
8 Went to Cane up; helped with Cooler Change.
9 Pumped Centrifuge sump.
10 took samples.
11 Switched feed: T-304C → p.452 → T-363A
12 Picked up tar in Centrifuge.
13 also picked up trash in Centrifuge.
14 Draining water on T-304C at the 5th
15 Cleaned pitch plant.
16
17
18
19
20

No heat, need heat, in the pitch plant.

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF			
	III				II			

LEVELS			
T-9	66.18	311B	13.70
304A	23.17	312B	55.16
304B	50.99	331A	57.68
304C	65.42	363A	13.55
306C	90.16	363D	88.33

COILS			
304A	9	363A	0
304B	2	363D	0
304C	3	306C	7
T-9	5		

Location: Doc Management

Revised on 1/20/06
13140130.frm

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PLANT OPERATOR TURN REPORT COMMENTS Rev. 1-20-06 13140102.frm

Date 10-17-06 Turn 11-7

Operator [illegible] Manager K.V. 5+8-ON 6+7-OFF

1. Primary cooler change #5 ON #7 OFF 1/2 rev #7 liquor side
2. Final cooler change REV middle plate cooler 2 X's. 75 GPM SWITCH TO T-363A.
3. Jar dehydrator is on feed from T-304C → P-452A → (T-363D.)
4. Stroked back flushed valves on #3+4, #9+10, #5+7 strainers.
5. Still pumping 5+7N → T-301.
6. STOP Still draining water off T-304C at 6 drain, STOP
7. Put steam on A+C primary cooler bottoms.
8. Took oil samples off #4 + #5 EXH's.
9. Absorber man washed his pumps out.
10. At 1:00AM K.V. + G.W. checked both ends of #4 + #5 EXH's suction drains and have suction on all ends.
11. At 1:10 K.V. + G.W. checked V-25 + HAVE SUCTION.
12. Draining T-304C at #5 drain.
13. Pumping DIST SUMP → SKIMMER TANK.
14. Mopped control room + put matts down.

Trucks

T9 (time) 0

T363A 0 T363D 11 T311 0 T312 T331 0

Acid 0 Others B.F. = 111

OVER

Location: Doc Management

PAGE 2

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 1-20-06 13140102 frm

Date 10-17-06 Turn 11-7

Operator [illegible] Manager K.V.

TIME = T-301 LEVEL'S	3:24 = 73.48	
22:45 = 72.45	3:45 = 73.63	
11:21 = 72.65	4:00 = 73.68	
11:41 = 72.72	4:24 = 73.75	
12:04 = 72.77	4:45 = 73.77	
12:41 = 72.89	5:00 = 73.80	
1:00 = 72.94		
1:20 = 73.06		
1:44 = 73.11		
2:00 = 73.16		
2:24 = 73.26		
2:45 = 73.33		
3:00 = 73.38		

Trucks

T9 (time) _____

T363A _____ T363D _____ T311 _____ T312 _____ T331

Acid _____ Others _____

Location: Doc Management

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 1-20-06 Page 1 13140102.fm

Date 10-17-06 Turn 7-3

Operator Sandra Manager Leo

- Washed up all absorber pumps
- Dehydrator on - T304C, P452A at 75 gpm to T363A
- Steam on Primary Bottoms - A, 1 thread & C, 1½
- Valve body job on 2 Battery Pusher side - 7 55 A, 8 35 A
- Draining Water - T304C, 4th (stopped 1st) - T301, 1st
- Primary Cooler Change - Coon, Rev. both sides 5 & 8
- Final Cooler Change - Rev. Middle Plate Cooler (2x)
- Stroked backflush valves - 5 & 7, 3 & 4, 9 & 10
- Still pumping 5 & 7 N to T301 with gear pump
- Pumping Dist. sump into skimmer tank
- West sump into pot
- Plant Suction is still 5.5
- T2 equalized into T3

Trucks

T9 (time) 1111

T363A _____ T363D 11 T311 _____ T312 11 T331 ___

Acid 11 Others B.F. - 1111

Location: Doc Management

PLANT OPERATOR TURN REPORT COMMENTS Rev. 1-20-06 Page 2 13141102.frm

Date 10-17-06 Turn 2nd

Operator Sandra Manager Leo

- Started up push + pull at 5+7 N. (11:20 A.M. till level is Ø in 5+7 decanter)
- Pumping D4 to T2 at 11:35 A.M. - SC.
- Gravity fed tar from T301 (74.36 - 73.91)
- Mtce. still working on #1 Booster
- Closed m/u bypass at #1 p.h.
- F.E.O. to 5+7 (loaded ½) + (½ in T3)

Trucks

T9 (time) _____

T363A _____ T363D _____ T311 _____ T312 _____ T331 _____

Acid _____ Others _____

Location: Doc Management

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 1-20-06 13140102.frm

Date 10·17·06 Turn 3rd

Operator E. Terry Manager Rex G.

Cooler Change (Pri) #7 on Row #6 #5 off.

" " (Fin) Row middle final cooler (2x)

Dehydrator on T304C → P452 → T363A

Stroked #3, 4, 9, 10 and 5 & 7 N/S backflush valves.

* Energy racked out P100F to work on breaker for 1 hour (2:30pm) (Back 2:5

Battery did valve body at 2:45pm.

" Loaded FEO into T3. (340 → 425pm.)

* Loaded AKJ tar into T304A at 3:15pm.

Pumped East sump into pot.

Gravity feed T301 into system. (0% Decanter Levels 5 & 4 9:00pm)

Sweep control room floor. Put supplies in cabinet.

Washed up all absorber pumps.

Trucks

T9 (time) 0

T363A 0 T363D 0 T311 0 T312 11 T331 0

Acid 0 Others 0 B.F.

Location: Doc Management

PLANT OPERATOR TURN REPORT COMMENTS Rev. 1-20-06 13140102.frm

Date 10-18-06 Turn 11-7

Operator Bob Kearby Manager Rex Gilman 7+8-ON 5+6-OFF

1. Primary cooler change #8-ON #6 OFF REV #6 liquor SIDE,
2. Final cooler change REV middle plate cooler 2 X's, 75 GPM
3. Sar dehydrator is on, feed T-304C → P-452A → T-363A.
4. Still pumping 5+7 → T-301.
5. Pumping D-102A → T-2, STOP STOP
6. Stroked back flushed valves on #3+4, #9+10, #5+7 strainers,
7. Absorber man washed his pumps out.
8. Draining water off T-304C at third drain, STOP at second drain. 5:00 AM
9. Absorber man checked + steamed EXH's suction drain on #4+5 and V-25 got suction,
10. John TUCKER checked #1 EXH steam flow out and inlet suction
11. Gravity fed T-301 → primary system,
12. Mopped control room + put matts down,

Trucks

T9 (time) 0

T363A 0 T363D 1111 T311 0 T312 0 T331 0

Acid 0 Others B.F. = 111

Location: Doc Management

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 1-20-06 13140102.frm

Date 10.18.06 Turn 2nd.

Operator E. Terry Manager Kyle/LM

Cooler Change (Pri) #5 on #7 off Rev. Liq. side #7

" " (Fin) Rev middle final plate cooler (2x)

Dehydrator on T304C → P452 → T363A

Stroked #3, 4, 9, 10 and 5 & 7 N/S backflush valves.

Maintainence switch oil machine to #4 booster.

Washed up all absorber pumps.

Dist. sump pumping → skimmer tank. (stopped)

Rodded A & C venturi.

Gravity feed T301 into system (75.63 → 74.60) (12:05 → 12:48) 43 mins.

Oil and tar put bucket under Load. spout T363D.

Put T363A on recycle Put mixe on T363A

System working on UPS for primary board. (maintain. tech)

Equalized T2 & T3.

Tanks Draining Water,
T301 → 1st
T304C → 2nd (stopped)
T304B → 6th
T306C → Tar 7th gas 8th

Trucks

T9 (time) 4

T363A 0 T363D 1 T311 0 T312 0 T331 0

Acid 1 Others 1 BF

Location: Doc Management

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 1-20-06 13140102.frm

Date 10/18/06 Turn 2-10

Operator J. CLARK Manager D.D.

Took-up mats. + swept control-room floor

Cooler change (PRI.) - #6 ON Rev. #5 - #8 OFF

" " (FINAL) - Rev. Middle plate cooler - 2X

Pumping oil into system - 2:55 → 6:35 - STopped

Dehydrator on, T-304-C → P-452 → T-363-A - (75 G.P.M.)

Backflushed - 3/4 - 9/10 - 5/7 - strainer Valves

Draining T-304-B, 6th drain - STopped - 7:pm

System steam out east Hontoon, put on, West off

Pumping 5/7 → T-301 - 5:37 → S.P.

Switched H.P.B. from east to West

Pumping D-4 → T-2

Gravity fed T-301 into primary - 8:05 → 8:50

Had system steam out T-301 level control - OK-NOW

Trucks Washed-up all absorber pumps

T9 (time)

T363A 0 T363D 3 T311 0 T312 0 T331 0

Acid 1 Others

Location: Doc Management

PAGE 1

PLANT OPERATOR TURN REPORT COMMENTS Rev. 1-20-06 f3140102.frm

Date 10-19-06 Turn 11-7 6+7 ON 5+8 - OFF

Operator Bob Kearby Manager D.D.

1. Jar dehydrator is ON, feed from T-304C → P-452A → T-363A (90%) 75 GPM SWITCH TO T-363D.
2. Primary cooler change #7 ON #5 OFF REV #6 REV #5 LIQUOR SIDE.
3. Final cooler change REV MIDDLE plate cooler 2 X's
4. Stroked backflushed valves on #3+4, #9+10, #5+7 strainers.
5. Still pumping 5+7N → T-301
6. Still pumping D-4 → T-2
7. ABSORBER MAN Checked + steam on V-25 have suction and #4 + #5 EXH's have suction
8. Draining water off T-304B at #6 drain.
9. (5+7) Switch pumps - took gear pump OFF + put push + pull pump ON, BACK ON 3:55 AM OFF - NOW because coupling BROKE, "Call back turn MAINTS." FIX 3:40 AM
10. Put steam on A+C primary cooler bottoms.
11. Took oil sample off #4 + #5 EXH's.
12. Absorber man washed his pumps out.
13. Gravity feed T-301 → primary system 3:10 AM → 3:50 AM 75.80 → 74.90
14. Mopped control room floor + put matts DOWN.

Trucks

T9 (time) 0

T363A 0 T363D 0 T311 0 T312 1 T331 0

Acid 0 Others BF = 0

15. Pumped west sump into pot.
16. Suction on #4 + #5 EXH's + speed when up + PdI's when up on A+C primarys + discharge on #4 + #5 up to 90 + 92.

(GRAVITY - FED T-301 INTO PRIMARYS) OVER

Location: Doc Management

PAGE 2

PLANT OPERATOR TURN REPORT COMMENTS Rev. 1-20-06 13140102.frm

Date 10-19-06 Turn 11-7

Operator [illegible] Manager D.D.

17. Took steam off A primary cooler bottom,
18. NEED NEW TEMP GAUGE ON INLET T-9 preheater,
19. STILL HAVE 2 OLD UPS IN BOOSTER CONTROL ROOM.
20.

Trucks

T9 (time) _____

T363A _____ T363D _____ T311 _____ T312 _____ T331 _____

Acid _____ Others _____

Location: Doc Management

PLANT OPERATOR TURN REPORT COMMENTS Rev. 1-20-06 13140102.fm

Date 10/19/06 Turn 2nd.

Operator E. Terry Manager L. McDowell

Cooler Change (Pr) #8 on Rev #7 #6 off. Rev. Liq. side

" " (Fin) Rev middle final plate cooler (2x)

Dehydrator on T304C → P452 → T363D.

Stroked #3, 4, 9, 10 and 547 N/S backflush valves.

Washed up all absorber pumps

P405 A ready for main. Put P405B on line

Pumped pitch stripper empty.

Pumping 547 to T301.

Had pumper truck in area.

Steam on A+C primary coolers

Gravity feed T301 into system. (1:00pm → 1:40pm)

Switched oil machine from #4 → #5 exhauster.

Trucks

T9 (time) 4

T363A 0 T363D 0 T311 0 T312 0 T331 0

Acid 1 Others BF = 11

Location: Doc Management

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 1-20-06 13140102.frm

Date 10/19/06 Turn _____

Operator _____ Manager _____

P3A ready at 1:00pm →
Pumped skimmer tank → A demucker.
Pumped chloride drum (1x).
Loading AKJ into T304A.

Trucks

T9 (lime) _____

T363A _____ T363D _____ T311 _____ T312 _____ T331 _____

Acid _____ Others _____

Location: Doc Management

PLANT OPERATOR TURN REPORT COMMENTS Rev. 1-20-06 13140102.frm

Date 10/19/06 Turn 2-10

Operator J. CLARK Manager D. D.

Cooler change (Rev.) #5-ON - #7-OFF

" " (FINAL) - Rev. Middle plate cooler - 2-X

Off loaded a AKJ truck into T-304A - Stopped - 3:10

Steam on bottom of A/C primary cooler

Dehydrator on, T-304C → P-452 → T-363D - (75 G.P.M.)

Draining T-304B, 6th drain

Dehydrator on, T-306C → P-452 → T-9 (40 G.P.M.)

Back flushed - 3/4 - 9/10 - 5/7 - strainer Valves

Washed-up all absorber pumps

Gravity fed T-301 into primary - 45 min / 8:10 - 8:55

Took-up mats. + swept control-room floor

Steaming + bleeding on tar line from #7 P.H. → T-304A (Plugged)

Trucks

T9 (time) _____

T363A 0 T363D 0 T311 0 T312 2 T331 0

Acid 0 Others _____

Location: Doc Management

PLANT OPERATOR TURN REPORT COMMENTS Rev. 1-20-06 13140102.frm

5+6-ON
7+8-OFF

Date 10-20-06 Turn 11-7

Operator Bob Kearby Manager B. McDOWELL

1. Primary cooler change #6 ON REV #5 #8 OFF #8 REV LIQUID SIDE
2. Final cooler change REV middle plate cooler 2 X's GPM: 36, 40, 45
3. Jar dehydrator is on feed from T-306C → P-452A → T-9.
STOP 4. Pumping D-102A → T-2, STOP
5. Stroked backflush valves on #3+4, #9+#10, #5+7 strainers.
6. Pumping pitch stripper W/ P-405B X's.
7. Still have steam on A+C primary cooler bottoms.
8. Absorber man checked V-25, #4 + #5 EXH's all have suction No water.
STOP 9. Pumping D-4 → T-2 STOP 3:55 AM
10. Draining water off T-304B at #6 drain.
STOP 11. Pumping 5+7N → T-301, STOP 4:30 AM
12. Gravity fed T-301 → primary system (75.80 → 75.41 4:00 AM → 4:40 AM).
13. Absorber man washed his pumps out.
Trucks 14. Mopped control room floor + put matts down.

T9 (time) 0

T363A 0 T363D 0 T311 0 T312 0 T331 0

Acid 0 Others B.F.=1

Location: Doc Management

PLANT OPERATOR TURN REPORT COMMENTS Rev. 1-20-06 13140102.frm

Date 10-20-06 Turn 7-3

Operator E. Terry Manager L. McDowell

Cooler Change (Pri) #7 on #5 off Rev. #6

" " (Fin) Rev middle final plate cooler

Dehydrator on T306C → P452 → T9

Stroked #3, 4, 9, 10 and 5+7 N/S back flush valves.

Pumping T3 → T304A.

Rodded A + C venturi.

Pumping T304A → T306C (10:20 am.

" " AKJ → T304A

" " 5+7 → T301 (Stopped).

Etf on Bypass at 9:00 am.

Washed up all absorber pumps.

Gravity feed T301 for 45 mins.

Trucks

T9 (time) 3

T363A 0 T363D 11 T311 0 T312 0 T331 0

Acid 0 Others B.F. = 1

Location: Doc Management

PLANT OPERATOR TURN REPORT COMMENTS Rev. 1-20-06 13140102.fm

Date 10/20/06 Turn 2-10

Operator S. CLARK Manager D.D.

Pumping T-3 → T-304-A

Cooler change (Pri.) - #8-ON-Rev. #7- #6-OFF

(Final) - Rev. Middle plate cooler-2X

Pumping 5/7 → T-301-3/10-

Dehydrator on, T-306C → P-452 → T-9-(22 G.P.M.)

Backflushed 3/4-9/10-5/7 strainer Valves

Pumping T304A → T-306-C-Stopped-9:30pm

5/7 gear pump, coupling broke (pump down) put push-pull on.

System change setting in #4/#5-FXH Antisurge controller

(WAS #4-70 #5-75 / NOW #4-67- #5-73 5:45pm) → System changed → Setting back-70-75 9pm

Draining T-304-B, 6th drain

Washed-up all absorber pumps

Equaling T-2/T-3-Stopped-9:20

Trucks

T9 (time) _____

T363A 0 T363D 1 T311 0 T312 0 T331 0

Acid 0 Others _____

Location: Doc Management

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 1-20-06 13140102.frm

Date 10-21-06 Turn 1st

Operator Sandra Manager B.M.

- Dehydrator on - T306C, P452 at 25 g.p.m. to T9
- Pumping T331 oil into system - 9%
- Primary Cooler Change - 5 on, 7 off + Rev. liq. 1/2 way thru turn
- Final Cooler Change - Rev. middle plate cooler (2x
- Pumping T3 to T304A (stopped), D4 to T2 (stopped), 5+7 N. to T301 with gear pump
- Draining Water - T304B, 6th
- Washed up all absorber pumps
- Gravity fed tar from T301 (76.00-75.02)
- Stopped pumping T3 to T304A at 5:20 A.M.
- Mopped booster floor

Trucks

T9 (time) _____

T363A _____ T363D 11 T311 _____ T312 _____ T331 _____

Acid _____ Others B.F. - 11

Location: Doc Management

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 1-20-06 13140102.fm

Date 10/21/06 Turn 2nd

Operator E. Terry Manager B. McDowell

Cooler Change (Pri)

" " (Fin) Rev. middle final plate cooler 2x

Stroked #3, 4, 9, 10 and 5 & 7 w/ back flush valves.

Pumping 5/7 to 301 Using Gear Pump

Had Mill Pumper Truck In Area

Flushed Tar Dehydrator with 304B for 3 Hrs (Back on 306C

Systems worked on HI + Low Alarms at 5/7 P.H.

Added 1 Coil to T-9 total of 6 Coils on

B.H #9 + #10 Boilers Tripped Cut Back on Steam

usage. Controlled Plant Suction with V-25 in Manual / (11 30 AM)

12 05 B.H Back Up. V-25 Back In Auto Also Put #5 Electric

oil Pump on During Problem (off) South Steam Oil Pump On

Did not Gravity feed 301 Due to Booster / B.H. Problem

#4 Electric Oil Pump would Not Come on During Problem

Trucks

T9 (time)

T363A 0 T363D 1111 T311 0 T312 0 T331 0

Acid 0 Others 1 BF

Location: Doc Management

PLANT OPERATOR TURN REPORT COMMENTS Rev. 1-20-06 13140102.fm

Date 10/21/06 Turn 2-10

Operator J. CLARK Manager D.D.

Cooler change (Pri.) - #7 ON - Rev. #6 - #5 OFF
(Final) - Rev. Middle plate cooler - 2X
Backflushed - 3/4 - 9/10 - 5/7 → strainer Valves
Dehydrator on, T-306-C → P-452 → T-9 (25 - G.P.M.)
Pumping 5/7 → T-301,
Washed-up all absorber pumps
Draining water off T-304-B, 5th drain
Gravity fed T-301 into primary cooler - 7:45 → 7:30 -
Pumping T-3 → T-304-A
Took-up mats & Cleaned-up bathroom

Trucks

T9 (time)

T363A 0 T363D 0 T311 0 T312 0 T331 0

Acid 0 Others

Location: Doc Management

PLANT OPERATOR TURN REPORT COMMENTS Rev. 1-20-06 13140102.fm

Date 10-22-06 Turn 1st

Operator Sandra Manager Dabbs

- Stroked backflush valves - 3+4, 9+10, 5+7
- Pumping 5+7 N. to T301 w/ gear pump from S.C.
- Elec. oil pump on #4 esh. had to have breaker reset
- Stopped pumping T3 to T304A at 2:10 A.M.
- Dehydrator on warm recycle — flushed T304B to T9 for i hauk.
- Pumping T304B to T304C at 3:15 A.M.
- Primary Cooler Change - 8 on Rev. both sides 7+ Co off, Rev. liquor side 1/2 way thru turn
- Final Cooler Change - Rev. middle plate cooler
- Washed up all absorber pumps
- Gravity feed tank from T301 (78.4)
- Mopped: booster floor

Trucks

T9 (time) ____

T363A ____ T363D ____ T311 ____ T312 ____ T331 ____

Acid ____ Others B.F. - 1

Location: Doc Management

PLANT OPERATOR TURN REPORT COMMENTS Rev. 1-20-06 13140102.frm

Date 10/22/06 Turn 2nd

Operator E. Terry Manager C. McDowell

(only using #2, 3, 5 Plate Coolers.)

Cooler Change (Pri) #2 #5 on #7, #8 off.

" " (fin) Rev. middle final plate cooler (2x)

Stroked #3, 4, 9, 10 and 5 & 7 N/S backflush valves.

Dehydrator on warm recycle.

#6, 7, 8 down and isolated for maintainence to change discharge value and check value on P100F.

2 threads on steam on A&C primary coolers.

Main. tech. did vibration test 9:30am.

Pumping T304B → T304C (stopped (12:10pm).

Washed up absorber pumps.

Had pumper truck in area.

Pumping T304A → T306C (10:55am).

Trucks Pumped chloride drum (1x). Discharge plugged.

T9 (time) 4

T363A 0 T363D 1 T311 0 T312 0 T331 0

Acid 0 Others BF → HH

Location: Doc Management

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 1-20-06 13140102.frm

Date 10/22/06 Turn 2nd

Operator E.I. Manager L.M

Pumping D4 → T2 (12:45pm)

Stopped pumping 547 → T301 0 tar. (1:25pm)

Gravity feed T301 into system. (78.73 → 77.75)

Trucks

T9 (time) _____

T363A _____ T363D _____ T311 _____ T312 _____ T331 _____

Acid _____ Others _____

Location: Doc Management

PLANT OPERATOR TURN REPORT COMMENTS Rev. 1-20-06 13140102.frm

Date 10/22/06 Turn 2-10

Operator J. CLARK Manager D.D.

Cooler change (Pri) - #3 ON Rev. #5 - #2 OFF
" " (Final) - Rev. Middle plate cooler
Pumping T304-A → T-306-C - Stopped - 7:12
Steam on bottom of A/C pri. cooler
Backflushed - 3/4-9/10-5/7 - strainer Valves
Dehydrator on warm recycle
Gravity fed T301 into pri. cooler - 8:05pm → 8:45
Had gas rescue at 8:08pm
Pumping 102-A → T-2 - 8:43 → S.P.
Took-up mats + swept control-room floor
Chloride discharge line was plugged / Open now - 9:40

Trucks

T9 (time)

T363A 0 T363D [illegible] T311 0 T312 2 T331 0

Acid 0 Others

Location: Doc Management

PLANT OPERATOR TURN REPORT COMMENTS Rev. 1-20-06 13140102.fm

Date 10/23/06 Turn 1st

Operator E. Terry Manager Kyle V.

Cooler Change (Pri) #2on #3off Rev #5
" " (Fin) Rev middle final plate cooler (2x)
Dehydrator on Warm recycle.
Stroked #3, 4, 9, 10 and 5+7 N/S backflush valves.
Equalized T2 → T3.
Washed up all absorber pumps.
Pumped Chloride drum.
Sweep & mopped control room floor.
Dehydrator on (145gm) T306C → P452 → T9 (39gpm).
Gravity feed T301 into system.
Steam on bottom of A + C primary coolers.

Trucks

T9 (time) 0

T363A 0 T363D 1 T311 0 T312 1 T331 0

Acid Others 14 BF

Location: Doc Management

PLANT OPERATOR TURN REPORT COMMENTS Rev. 1-20-06 13140102.fm

Date 10-23-06 Turn 3-11

Operator Bob Yearly Manager B. MCDOWELL

1. Primary cooler change #2 ON 5 OFF REV #6, #7 + #8 liquor side.
2. Final cooler change REV middle plate cooler
3. Jar dehydrator is on, feed from T306C → P452A → T-9 GPM40
4. Stroked backflushed valves on #3+4, #9+#10, #5+7 steamers.
5. Took oil sample off #4 + #5 EXH's.
6. Pumping T-304A → T-306C STOP. STOP
7. System change #5 EXH B1 from 67.5 to 70. (AS JIM HOPPE)
8. Steamed + checked for suction on V-25, #4 + #5 EXH's have suct
9. still pumping 5+7N → T-301.
10. Absorber man washed his pumps out.
11. Gravity fed T-301 → primary system 8:10 PM → 9:00 PM.
12. Picked up matts + swept control room floor.
13.

Trucks

T9 (time) 0

T363A 0 T363D 0 T311 0 T312 0 T331 0

Acid 0 Others $b_1F_1 = 1$

Location: Doc Management

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 1-20-06 13140102.frm

Date 10/25/06 Turn 10-6

Operator S. CLARK Manager D. D.

Cooler change (Pkl) - #5-ON #3-OFF
" " (Final) - Rev. Middle plate cooler - 2-X
Pumping 102-A → T-2 - Stopped - 11:23
Draining water off T-304-C, 3rd drain
Pumping 5/7 → T-301
Backflushed - 3/4-9/10-5/7 - strainer valves
Dehydrator on, T-306C → P-452 → T-9 - (45 G.P.M.)
Coupling broke on gear pump at 5/7 - back turn maints. repaired it
Washed-up all absorber pumps
Mopped control-room floor & clean-up bath
Service water not turning, back turn maints. checked it out,
Not running

Trucks

T9 (time) 0

T363A 0 T363D 3 T311 1 T312 0 T331 0

Acid 0 Others 2 → B.F.

Location: Doc Management

PLANT OPERATOR TURN REPORT COMMENTS Rev. 1-20-06 13140102.frm

Date 10/25/06 Turn 6-2

Operator J. CLARK Manager D. D.

Cooler change (Rev.) - #6 ON - Rev. #5 - #2 OFF
(Final) - Rev. Middle plate cooler - 2X
Pumping T-304-A → T-306-C
Dehydrator on, T-306-C → P-452 → T-9 (45 - G.P.M.)
Backflushed - 3/4 - 9/11 - 5/7 - drains Valves
Rotated out A/C Vent.
Shut down both III pumps, for maints. to change Valves.
Washed-up all absorber pumps
Draining T-304-C, 3rd drain
Gravity fed T-301 into primary cooler - 45 min.
Maints. working on east service water drains (Final)

Trucks

T9 (time) 4

T363A 0 T363D 1 T311 4 T312 0 T331 0

Acid 1 Others 4 → B.F.

Location: Doc Management

PLANT OPERATOR TURN REPORT COMMENTS Rev. 1-20-06 13140102.fsm

Date 10/23/06 Turn 2nd

Operator E. Terry Manager C. Jones

Cooler Change (Rev) #3 on Rev #5 #2 off.

" " (Fin) Rev middle final plate cooler (2x)

Dehydrator on T306C → P452 → T9

Stroked #3, 4, 9, 10 and 5 & 7 N/S backflush valves

Pumped "B" benzol scrubber empty.

Washed up all absorber pump's.

System checked B & C scrubber m/up flow.

Resampled T9 sample.

Pumping water off T311 (9:50am – 12:50am) Stopped.

* #4 Booster in Local #5 in auto/Antisurge. #4 70 – 70 #5 → to #4 67.5 – #5 75

Gravity feed T301 into system (12:05pm – 12:50pm)

Steaming & bleeding on B & C Naptha scrubber m/u flow.

Trucks

T9 (time) 4

T363A 0 T363D 1 T311 0 T312 11 T331 0

Acid 0 Others IIII BF

Location: Doc Management

PLANT OPERATOR TURN REPORT COMMENTS

Rev 1-20-06 13140102.frm

Date 10/23/06 Turn 2nd

Operator E.T. Manager C.J.

Set to Load out of T311 producing into T312.
Lost Power to Booster building primary panel board on ups.. and Lost P111B and P113's in final pump ROOM.
Lost P119A

Trucks

T9 (time) ____

T363A ____ T363D ____ T311 ____ T312 ____ T331 ____

Acid ____ Others ____

Location: Doc Management

PAGE 1

PLANT OPERATOR TURN REPORT COMMENTS Rev. 1-20-06 f3140102.fm

Date 10-25-06 Turn 3-11

Operator Bob Nearby Manager B. MCDOWELL

1. Primary cooler change #2 ON #5 OFF #6 REV REV #5 LIQUOR SIDE
2. Final cooler change REV middle final plate cooler 45 GPM
3. Tar dehydrator is on, feed from T-306C → P-452A → T-9
4. Absorber man washed his pumps out.
5. Stroked backflushed valves on #3+4, #9+10, #5+7 strainers.
6. Draining water off #4 EXH suction drains. DRAINED + V-25
STOP 7. Pumping T-304A → T-306C. STOP
8. Equalizing T-2 → T-3.
9. Draining water off T-304B at #5 drain,
10. Still pumping 5+7 → T-301 RPM 1400.
11. Absorber took oil sample off #4 + #5 EXH'S.
12. Maints finished putting valves in, ON FINAL SIDE we put P-111A+C on line and P-111B will not reset, need maints.

OVER

Trucks

T9 (time) 0

T363A 0 T363D 1 T311 1 T312 0 T331 0

Acid 1 Others B.F. = 0 T-304A = 1 from TERRE HAUTE. 1/2 and 1/2 in 5+7

Location: Doc Management

PAGE 2

PLANT OPERATOR TURN REPORT COMMENTS Rev. 1-20-06 13140102.fm

Date 10-25-06 Turn 3-11

Operator Bob Kearby Manager B. McDOWELL

13. Pumped T-331 into system.

14. Picked up matts + swept control room floor.

15. Pumping T-3 → T-304A.

16. Gravity fed T-301 → primary system 45 mins.

17. Put TRUCK INTO T-304A from TERRE HAUTE (K.V. said to 304. B.M. said ½ into T-304A + ½ into 5+7).

18. Maints fixing gear pump at 5+7.

19. Pumping 5+7N → T-301. 9:45PM → S.P.

Trucks

T9 (time) _____

T363A _____ T363D _____ T311 _____ T312 _____ T331 _____

Acid _____ Others _____

Location: Doc Management

PLANT OPERATOR TURN REPORT COMMENTS Rev. 1-20-06 13140102.fim

Date 10/26/06 Turn 1st

Operator E. Terry Manager B. McDowell/Kyle. V.

Cooler Change (Pri) #5 on Rev #6 #2 off.
" " (Fin) Rev. middle final plate cooler. (2x)
Dehydrator on T306C → P452 → T9
Stroked #3, 4, 9, 10 and 5&7 u/s backflush valves.
½ Feo into T304A and ½ into 5&7 Liquor system.
5&7 gear pump has broken coupling again.
Washed up absorber pumps.
Pumping T2 & T3 → T304A (stopped 400am)
Vapor recovery line probably plugged at L.O. Loading dock
Gravity feed T301 into system.
Pumped oil into #4 & #5.
Sweep & mopped control room.

Trucks

T9 (time) 0

T363A 0 T363D 1 T311 111 T312 0 T331 0

Acid 0 Others 1111 BF.

Location: Ibnc Management

PLANT OPERATOR TURN REPORT COMMENTS Rev. 1-20-06 13140302.fm

Date 10/26/06 Turn 6-2

Operator J. CLARK Manager L. M.

Cooler change (Rev.) - #2 ON - Rev. #5 #6 OFF
" " (Final) - Rev. Middle plate cooler - 2-X
Dehydrator on, T-306C → P-452 → T-9 - 35-G.P.M.
Pumping D-4 → T-2
Backflushed - 3/4-9/10-5/7 - strainer Valves
Draining T-304B, 5th drain - Stopped 8:55
Dumped A - Demuckers / 111B pump ready (Final)
Pumping T-301 → T-304B, With 302 Gear pump - 425-RPM
Pumped water off T-312, 425 going into T-311
Pumping T-304-A → T-306C - Stopped - 12:15
Washed up all absorber pumps
Put 1 AKJ into T-304-A / South 405-P ready

Trucks

T9 (time) 4

T363A 0 T363D 1 T311 2 T312 2 T331 0

Acid 0 Others 4 → B.F.

Location: Doc Management

PLANT OPERATOR TURN REPORT COMMENTS Rev. 1-20-06 13140102.fm

Date 10-26-06 Turn 3-11

Operator Bob Kearby Manager D.D. 2+6-ON

1. Primary cooler change put #6ON #5 OFF
2. Final cooler change REV middle plate cooler 2X's. 35 G.P.M.
3. Jar dehydrator is on, feed from T-306C → P-452A → T-9.
4. STOP STILL Pumping T-301 → T-304B, with 302 gear pump 325-350 RPM -425 RPM, take T-301 to 70% STOP
5. Still pumping 5+7 → T-301.
6. Stroked backflush valves on #3+4, #9+10, #5+7 strainers.
7. Absorber man washed his pumps out.
8. STOP Still pumping D-4 → T-2. STOP 5:25 PM
9. STOP STILL Dumping A DEMUCKER STOP 6:14 PM FILLING A demucker back up.
10. Maintn working on 302 gear pump.
11. Raise A+C BENZOL SCRUBBERS UP from 40% TO 50% (as C.J.).
12. Pumped T-331 into system (as C.J.) SUMP (5:45 PM → ~~10:00 PM~~ 9:25 PM).
13. NEED NEW PUMP - TO PUMPED DIST OIL SIDE INTO SKIMMER TANK.
14. SWITCH P-425 back into T-312.
15. LIGHT OIL TRUCKS HAVE BEEN CANCEL UNTIL SUNDAY NIGHT (as Chuck Jones).

Trucks

T9 (time) 0

T363A 0 T363D 1 T311 0 T312 0 T331 0

D15C1 #4=8.2 #5=8.3

Acid 1 Others BF = 0 V-25-28.9-27.3

16. Gravity feed T-301 → primary system NO battery pushed hard
17. Picked up matts + swept control room floor + empty garbage can

Location: Doc Management

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 1-20-06 13140102.frm

Date 10/27/06 Turn 1st

Operator E. Terry Manager Kyle V.

Cooler Change (Pri) #500 Rev #6 #2 off.

" (Fin) Low middle final plate cooler. (2x)

Dehydrator on T306C → P452 → T9

Stroked #3, 4, 9, 10 and 5x7 N/S backflush valves.

Pumped D102A → T2 (stopped)

Washed up all absorber pumps.

Swaep & mopped control Room floor.

5x7 pumping T301

Gravity feed T301 into system

Trucks

T9 (lime) 0

T363A 0 T363D III T311 0 T312 0 T331 0

Acid 0 Others III BF.

Location: Doc Management

PLANT OPERATOR TURN REPORT COMMENTS Rev. 1-20-06 13140102.fm

Date 10/27/06 Turn 6-2

Operator S. CLARK Manager L. M.

Cooler change (Pri.) - #2 ON Rev. #5 - #6 OFF
(Final) - Rev. Middle plate cooler - 2-X
Backflushed - 3/4 - 9/10 - 5/7 - strainer valves
Pumping 5/7 → T-301
Washed-up all absorber pumps
Pumping T-304-A → T-306-C - Stopped - 12:35 pm
Had system check, T-301 Level OK Now 1% High
Pumping T-301 → T-304-B, with 101-A pump
Equalizing T-2/T-3, also pumping T-3 → T-304-A - 1:05 pm
Maints. switched dewatering pumps, from #5 → #4 - RXH

Trucks

T9 (time) 4

T363A 0 T363D 2 T311 0 T312 0 T331 1

Acid 1 Others 1 11 → BF

Location: Doc Management

PLANT OPERATOR TURN REPORT COMMENTS Rev. 1-20-06 13140102.fm

Date 10-27-06 Turn 3-11 2+6-ON

Operator Bob Healy Manager D.D.

1. Primary cooler change out #6 ON took #5 OFF
2. Final cooler change REV middle plate cooler
3. Tar dehydrator is my feed from T-306C → P-452A → T-9 23 GPM
4. Still pumping T-3 → T-304A. STOP STOP
5. Still equalizing T-2 + T-3. STOP STOP
6. Absorber man washed his pumps out.
7. Stroked backflushed valves on #3+4, #9+10, #5+7 strainers.
8. Absorber man steam + check #4+5 EXH's for water + suction
9. JIM HOPPE change #4 EXH rack from 60-57.5
10. Chuck Jones said lower ATC benzol scrubbers to 40 % (TO KEEP LEVEL IN LIGHT OIL STRIPPER.
11. Steaming line out from 209 pumphouse to T-304C. STOP at 9:55PM STEAM OFF + VALVES CLOSED
12. Put steam on C primary cooler bottom.
13. Pumped east sump into pit 6:00PM → 6:10PM.
14. Pumped dilbide drum empty.
15. Put STEAM ON BOTTOM 2 TEST COCKS ON S-517 decanter
16. Picked up mats + swept central room floor

Trucks

T9 (time) 0

T363A 0 T363D 0 T311 0 T312 0 T331 0

Acid 0 Others B.F. = 0

17. TANK + VESSEL OVERVIEW computer when OUT and 8:35PM JOHN TUCKER worked on it, got back at 9:40PM. STILL can not print reports + TOTAL out on FAX.

Location: Doc Management

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 1-20-06 13140102.frm

Date 10/20/06 Turn 1st

Operator E. Terry Manager Rex. G.

Cooler Change (Pri) #5 on Rev #6 #2 off.

" " (Fin) Rev. Middle final plate cooler. (2x)

Dehydrator on T306C → P452. → T9

Stroked #3, 4, 9, 10 and 547 N/S backflush valves.

Stopped pumping 547 → T301.

Sweep & mopped control room floor.

Systems fixed Neshaps computer.

Pumped oil into system (2:30 Am. → 5:00 Am)

" chloride drum.

Gravity feed T301 into system.

Washed up absorber pump.

Trucks

T9 (time) 0

T363A 0 T363D 111 T311 0 T312 0 T331 0

Acid 0 Others 1 BF

Location: Doc Management

PLANT OPERATOR TURN REPORT COMMENTS Rev. 1-20-06 13140102.frm

Date 10/28/06 Turn 6-2

Operator J. CLARK Manager D. D.

Cooler change (Pri.) #2-ON Rev. #5-#6-OFF
" " (Final) - Rev. Middl. plate cooler - 2X
Backflushed - 3/4-9/10-5/7 - strainer Valves
Dehydrator on, T-306C → P-452 → T-9 - (-25-G.P.M.)
Pumping T-304A → T-306C - Stopped - 9:45 AM
All 8 - steam coils on T-9
Transmitter out, C-Vent. Liq. flow, plus floor needs to be fix (Hole)
Washed-up all absorber pumps
Gravity fed T-301 into pri. cooler - 45 min.
Draining T-304B, 5th drain
Computer reading out, for L.O. process temp.
" will not print tank status sheet.

Trucks

T9 (time) 3

T363A 0 T363D 2 T311 0 T312 0 T331 0

Acid 0 Others 4 → B.F.

Location: Doc Management

PLANT OPERATOR TURN REPORT COMMENTS Rev. 1-20-06 13140102.fm

Date 10/28/06 Turn 2-10

Operator J. CLARK Manager R.G.

Cooler change (PRI.) #6 ON #5 OFF

" " (FINAL) Rev. Middle plate cooler-2X

Draining T-304-B, 5th drain

7-steam coils on T-9

Pumped chloride drum empty

Pumping D-4 → T-2-3:20→S.P. / Pumping 5/7→T-301-Stopped-8:pm

Computer still out, for L.O. process temp.

" will not print tank status sheet.

Gravity fed T-301 into pri. cooler

Washed-up absorber pumps

Dehydrator on, T-306-C → P-452 → T-9 (25-G.P.M.)

Backflushed-3/4-9/10-5/7-strainer Valves

Trucks

T9 (time) 0

T363A 0 T363D 0 T311 0 T312 0 T331 0

Acid 0 Others 0

Location: Doc Management

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 1-20-06 13140102.frm

Date 10/28/06 Turn 1st

Operator E. Terry Manager B. McDonell

Cooler Change (Pri) #5 on Rev #6 #2 off.

" " (Fin) Rev middle final plate cooler (2x)

Stacked #3, 4, 9, 10 and 5 & 7 N/S back-flush valves.

Dehydrator on T306c → P452 → T9

Gravity feed T301 into system.

Set clocks back 1 hour.

Sweep & mopped control room floor.

Systems fixed computer

Pumped chloride drum empty.

Washed up all absorber pumps.

Trucks

T9 (time) 0

T363A 0 T363D 0 T311 0 T312 0 T331

Acid • Others UH BF

Location: Doc Management

PLANT OPERATOR TURN REPORT COMMENTS Rev. 1-20-06 13140102.frm

Date 10-29-06 Turn 7-3 2+5-ON

Operator Bob Kearby Manager B. MCDOWELL

1. Primary cooler change #2 ON #6 OFF REV #5 REV #6 11:00AM LIQUOR SIDE
2. Final cooler change REV middle plate cooler 2X's. 23-25GPM
3. Tar dehydrator iron feed from T-306C → P452 → T-9.
4. Absorber washed pumps out
5. Equalizing T-2 – T-3.
6. Stroked backflush valves on #3+4, #9+10, 5+7 strainers
7. Draining water off T-304B at #5 drain
8. Took oil samples off #4 + #5 EXH's.
9. Steamed + checked #4 + #5 EXH's for water at suction.
10. Pumping T-3 → T-304A
11. Pumped water off T-312 + set P-425 → T-311. T-312 in scale for loading TRUCK.
12. Pumping T-304A → T-306C. (11:00AM →
13. Gravity fed T-301 → primary system (11:25AM → 12:07).
14. Pumping 5+7N → T-301 at 1:20PM.

Trucks

T9 (time)

T363A 0 T363D 1 T311 0 T312 0 T331 0

Acid 0 Others IIII BF

Location: Doc Management

PLANT OPERATOR TURN REPORT COMMENTS Rev. 1-20-06 13140102.fm

Date 10-29-06 Turn 3-11 2+6-ON

Operator Bob Yeasby Manager REX GILMAN

1. Primary cooler change #6 ON + #5 OFF + REV #5 LIQUOR SIDE
2. Final cooler change REV middle plate cooler 2X's.
3. Sec dehydrator is on, feed from T-306C → P452A → T-9. 25 GPM
4. Still pumping 5+7N → T-301. STOP 6:38 PM STOP
5. Still pumping T-3 → T-304A. STOP 4:40 PM STOP
6. Still pumping T-304A → T-306C. STOP (3:36 PM) STOP
7. Stroked backflush valves on #3+4, #9+10, #5+7 strainers.
8. Equalizing T-2 → T-3. STOP STOP
9. Draining WATER off T-304B at #6 drain.
10. Absorber MAW washed his pumps out.
11. Gravity feed T-301 → primary system (7:55 PM – 8:57 PM). 85.05 – 84.00
12. Pumping T-331 → system (8:12 PM – 9:20 PM LIGHT OIL STRIPPER LEVEL 28.3
13.

Trucks

T9 (time) 0

T363A 0 T363D 0 T311 0 T312 0 T331 0

Acid 0 Others B.E. = 0

Location: Doc Management

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 1-20-06 13140102.frm

Date 10/30/06 Turn 1st

Operator E. Terry Manager B. McDowell

Cooler Change (Pri) #5 on Rev #6 #2 off
" " (Fin) Rev middle final plate cooler (2x)
Dehydrator on T306C → P452 → T9.
Stroked #3, 4, 9, 10 and 5 & 7 N/S backflush valves
Swept + mopped control room floor
T304 B draining water on 6th
Washed up all absorber pumps.
Gravity feed T301 into system.

Trucks

T9 (time) 0

T363A 0 T363D 0 T311 0 T312 11 T331 0

Acid 0 Others 11 BF

Location: Doc Management

PLANT OPERATOR TURN REPORT COMMENTS Rev. 1-20-06 13140102.fm

2+5-ON

Date 10-30-06 Turn 7-3

Operator Bob Yearly Manager LEO MCDOWELL

1. Primary cooler change put #2 ON + #6 OFF + REV #6 LIQUOR SIDE
2. Final cooler change REV middle plate cooler 2X's. 26 GPM RASIE TO 35 GPM L.M.
3. Sar dehydrator is on, feed T-306C → P452A → T-9.
NO ~~4. Sar dehydrator is on, feed T-304C → P452A → T-9~~ NO
5. Stroker backflush valves on #3+4, #9+10, #5+7 strainers.
6. Draining water off T-304B at #6 drain.
7. Absorber man washed his pumps out.
8. Pumped east sump into pot.
9. Sab call need resamples off T-9, P-452, #5 + #6 plate cooler
10. Still draining water off T-304B at #6 drain.
11. Maints working ON LIGHT OIL LOADING DOCK 11:55 → 12:35
12. Gravity feed T-301 → primary system from 12:00 → 2:00PM LEO MCDOWELL
13. Pumped chloride drum empty 2 X's.
14. Pumping T-304A → T-306C

Trucks

T9 (time) 1

T363A 11 T363D 1 T311 0 T312 11 T331 0

Acid 111 Others B.F. = 11

SALT TRUCKS = 11

Location: Doc Management

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 1-20-06 13140102.Gm

Date 10-30-06 Turn 3rd

Operator Sandra Manager Rex

- Pumping 5+7 N. to T301 at 2:20 p.m. w/ Push + pull
- Backflush valves stroked at 5+7, 3+4, 9+10
- Pumping T304A to T306C from S.C. - 4:45 p.m.
- Dehydrator on - T306C, P452A at
- Cleaned bathroom, swept booster control floor
- Primary Cooler Change - 6 on, 5 off. Rev. liq. 1/2 way thru
- Final Cooler Change - Rev. middle plate cooler
- Draining water - T304B, 6th * stopped *
- Pumping D102A to T2 at 7:00 p.m.
- Washed up all absorber pumps
- Gravity fed tar from T301 from 7:15 p.m. - 8:30 p.m. - inlet suction got up to 51% while plant suction went down to 1.8 - was back to normal at 10:00 p.m.
- Pumped oil into system - 4% * still going at S.C.

Trucks

T9 (time) _____

T363A _____ T363D _____ T311 _____ T312 _____ T331 _____

Acid 1 _____ Others _____

Location: Doc Management

DATE 3-12-06 TURN 11-7 OPERATOR Neil Jones
MANAGER

OIL AND TAR OPERATION LOG

1 Tar System is: on Feed From T-304c → P-452 → T-304c
2 Tanks with mixers are: T-363 D
3 Tanks recycling are: T-9, T-363A+D
4 Preheater temps are: T-9 in 118° out 120° T-304c in 92° out 116
5 Loading trucks from: T-9, T-363A, T-311 P-425 → T-312
6 Went to line-up helped with cooler change
7 Drained Gas Mains
8 Ran T-363A Mixer For 5 mins
9 Took Samples off T-9 T-363A+D, P-415, P-452, T-306c, T-304A,B,&C
10 Dropped Samples @ the Lab
11 Phenol Drum over Run due to discharge line Plugged.
12 Helped with second cooler change
13
14
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PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF			
Ø	Ø	Ø	Ø	Ø	////	Ø	Ø	Ø

LEVELS			
T-9	41.9	311B	45.1
304A	62.8	312B	22.3
304B	49.8	331A	42.2
304C	49.5	363A	79.6
306C	26.5	363D	71.2

COILS			
304A	9	363A	3
304B	3	363D	2
304C	6	306C	7
T-9	7		

DATE 3/12/06 TURN 7-3 OPERATOR E. Moore
MANAGER K. V

OIL AND TAR OPERATION LOG

1 Tar System is: On feed from T-304C → P-452 → T-304C
2 Tanks with mixers are: T-363 D
3 Tanks recycling are: T-9, T-363 A & D
4 Preheater temps are: T-9 IN 114° out 116° T-304C IN 94° out 110°
5 Loading trucks from: T-9, T-363A, T-311 P-425 → T-312
6 Went to line-up, helped w/cooler change
7 Drained gas maine
8 Pumped chloride empty (2X'S)
9 Pumped centrifuge pump empty
10 Ran T-363A mixer for 5 mins.
11 Pumped pitch stripper empty (3X'S) P-405B
12 Cleaned up around T-304B transmitter (Place where samples are
13 Dumped tar bucket under T-363A mixer
14 Cleaned P. Plant office
15
16 X Check T-304A again for water
17
18
19
20

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF	T-331		
0	0	0	0	0	III	I	0	II

LEVELS			
T-9	40	311B	45
304A	62	312B	25
304B	53	331A	58
304C	48	363A	79
306C	86	363D	91

COILS			
304A	9	363A	3
304B	3	363D	2
304C	6	306C	7
T-9	7		

DATE 3-13-06 TURN 11-7 OPERATOR N. Jones
MANAGER

OIL AND TAR OPERATION LOG

1 Tar System is: on Feed from T-304c ——→ P-452 ——→ T-304c
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9 T-363A+D
4 Preheater temps are: T-9 in 114 out 116 T-304c in 94 out 120
5 Loading trucks from: T-9, T-363A, T-311 P-425 → T-312
6 Drained both GAS Mains
7 Ran mixer on T-363A for 5min
8 Draining water on T-304a @ 3rd cock
9 Took samples off of T-9, T-363A+D, P-302, P-415, P-452, T-306c,
10 T-304A B+C
11 Went to line-up + helped with Cooler Change
12 Change Tar Feed to T-306c ——→ P-452 ——→ T-304c
13 for 2 Hours then going to Warm Recycle
14 ON WARM RECYCLE
15 Steam on line going to T-304c
16 Shutdown Distillation Sump Pumps
17
18
19
20

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF			
Ø	Ø	1	Ø	Ø	11	Ø	Ø	Ø

LEVELS			
T-9	41	311B	37
304A	58	312B	32
304B	60	331A	58
304C	47	363A	80
306C	23	363D	91

COILS			
304A	9	363A	3
304B	3	363D	2
304C	6	306C	7
T-9	7		

DATE 3-13-06 TURN 7-3 OPERATOR Bob Kearly

OIL AND TAR OPERATION LOG

1 Tar System is: ON WARM RECYCLE
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9, T-363A + D.
4 Preheater temps are: T-91W 106 OUT 108
5 Loading trucks from: T-9, T-363A + T-311. P-425 → T-312.
6 Drained gas mains.
7 When to line up + help with cooler change.
8 Steamed out 427 line for system + closed blocks
9 valves on both sides (FLOW METER + WEDGE METER) so
10 system put in NEW METER + have 2 BLEEDERS OPEN ON LINE.
11 Put centrifuge sump pump ON → centrifuge floor was
12 flood out.
13 Pumping chloride drum out.
14 Steaming both 400 pumps to #400 heater have
15 hole in elbow. Have P-452B → T-9.
16 P-405B is on pumping pitch stripper out.
17 Maints + systems finished put 1 meter in.
18 East 400 pump has BLOW SEAL.
19 Have steamed on P-204A going to 427.
20 Have water on P-415B loss flow got flow back.
Have STEAM on T-304C in 4 places + 1 in centrifuge building.

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF			
11111	0	0	0	T-306C 1	0	0	0	11

LEVELS			
T-9	39	311B	36
304A	55	312B	34
304B	64	331A	58
304C	48	363A	67
306C	25	363D	97

COILS			
304A	9	363A	3
304B	3	363D	2
304C	3	306C	7
T-9	7		

NEWFORMS
Oil and Tar oper log

Revised on 9/16/04 MF
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DATE 3-13-06 TURN 3-11 OPERATOR T-Cargle

OIL AND TAR OPERATION LOG

1 Tar System is: DOWN
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9, T-363A & T-363D
4 Preheater temps are: T-9 IN 108 out 110
5 Loading trucks from: T-9, T-363A & T-311 P425 → T-312
6 Drained Bath Gas mains
7 No Draining on T-304A, B, C
8 Went to Line up, Help with Cooler change
9 Steam on P-204A going to 427 (Stopped)
10 Steam on P-452B → T-9 (Stopped)
11 Bath H400 pump OOO, H-400 heater has hole
12 in elbow
13 Have to steam on each pass north, South &
14 West throughout night
15 Ran mixer for 5 mins on T-363A 3:00p to 3:05p
16 Need Sucker Truck by T-9 Loading dock, behind
17 T-9 West side & by P-9 pumps
18 Pumped Chloride empty
19 Steamed out P-405 put pump lock on when level
20 reached 80%
P.O Pumped oil into System Start 3:30p to 7:35p
Pumping T-304C to T-363A, Take to 90%, Then
Pump T-304B To T-304C

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF			
0	0	1	0	0	11	0	0	0

LEVELS			
T-9	40	311B	33
304A	60	312B	37
304B	68	331A	53
304C	48	363A	69
306C	25	363D	91

COILS			
304A	9	363A	3
304B	3	363D	2
304C	3	306C	7
T-9	7		

NEWFORMS
Oil and Tar oper log

Revised on 9/16/04 MF
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DATE 3-14-06 TURN 11-7 OPERATOR N. Jones

OIL AND TAR OPERATION LOG

1 Tar System is: T-304C → T-363A
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9 T-363A+D
4 Preheater temps are: T-9 in 108 out 110 T-304c in 92 out 120°
5 Loading trucks from: T-9 T-363A + T-311 P-425 → T-312
6 Drained Gas Mains
7 No draining on T-304 A B or C
8 Went to line-Up helped with Cooler Change
9 Steaming on each pass on Dehydrator throughout the night
10 Ran mixer on T-363A For 5mins
11 Stopped Feed to T-363A Steaming out Lines Multiple steams on
12 T-304c line 1 by P-203c + 2 up stairs
13 Steam on P-304 going to T-306c steaming out line
14 Lines setup to pump T-304B to T-304c
15
16
17
18
19
20

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF			
0	0	1	0	0	1111	0	0	0

LEVELS			
T-9	40	311B	28
304A	70	312B	90
304B	72	331A	53
304C	42	363A	90
306C	26	363D	91

COILS			
304A	4	363A	3
304B	3	363D	2
304C	3	306C	7
T-9	7		

NEWFORMS
Oil and Tar oper log

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DATE 3-14-06 TURN 7-3 OPERATOR Bob Kearly

OIL AND TAR OPERATION LOG

1 Tar System is: DOWN COLD HOLE IN LINE
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9, T-363A + D.
4 Preheater temps are: T-9 IN 110 OUT 112
5 Loading trucks from: T-9, T-363A + T-311. P-425 → T-312.
6 Pumping T-2 → T-304A.
7 Drained gas mains.
8 Ran T-363A mixer for 5 mins 7:05 → 7:10 AM.
9 Pumping T-304B TO T-304C.
10 Maints working EAST 400 PUMP-D repacking SEAL.
11 Closed valves on FLASH DRUM - VENT - MIXER for maints
12 worked on H-400 heater pass.
13 Emptied garbage can into BOX.
14 Pumped chloride drum empty.
15 Pumped pitch stripper empty, steam on P-405B.
16
17
18
19
20 T-363A steam coils are off + drained out + main valve to coils is shut off + bleeder valves are open.

PC		LIGHT OIL		FRONT END OIL		WASH OIL N		T-9
363A	363D	311	312	CHEM	BF	T-331		
11	Ø	Ø	Ø	1 #2	111	Ø	Ø	11

LEVELS			
T-9	58	311B	28
304A	75	312B	22
304B	55	331A	53
304C	52	363A	82
306C	21	363D	91

COILS			
304A	9	363A	0
304B	3	363D	2
304C	3	306C	7
T-9	7		

NEWFORMS
Oil and Tar oper log

Revised on 9/16/04 MF
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DATE 3-14-04 TURN 3-11 OPERATOR T-CARGLE

OIL AND TAR OPERATION LOG

1 Tar System is: On Warm Recycle
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9, T-363A+D
4 Preheater temps are: T-9, IN 100, OUT 102
5 Loading trucks from: T-9, T-363A + T-311 P 425 → T-312
6 Drained Both Gas Mains
7 No Draining on T-304A, B + C
8 Pump Centrifugal Sump Empty
9 Ran mixer 5 mins on T-363A 2:30p to 2:35p
10 Ran Light oil Loading dock sump. Removed water
11 Still pumping T-304B To T-304C. Take T-304B
12 to 10%
13 Lit the Dehydrator, T-304A Going Threw West
14 P-400 pumps
15 Streaming on T-9
16
17 (KV)
18
19
20
East P400 Pump is vibrating Heavy

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF			
11	0	11	0	0	11	0	0	0

LEVELS			
T-9		311B	
304A		312B	
304B		331A	
304C		363A	
306C		363D	

COILS			
304A	9	363A	0
304B	3	363D	2
304C	3	306C	7
T-9	7		

NEWFORMS
Oil and Tar oper log

Revised on 9/16/04 MF
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DATE 3/15/06 TURN 11-7 OPERATOR E. Moore

OIL AND TAR OPERATION LOG

1 Tar System is: Ox feed from T-304A → dehydrator / Warm Recycle
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9, T-363 A & D
4 Preheater temps are: T-9 in 108° out 110°
5 Loading trucks from: T-9, T-363A, T-311 p-425 → T-312
6 Went to line up
7 Steamed & bled on discharge line of phenol pump (open now) Pump
8 Drained gas mains
9 Pumped chloride empty (2x's)
10 Pumped pitch stripper empty w/ P-405B (2x's)
11 Ran T-363A mixer for 5 mins.
12 Adjusted north & south passes (kept loosing flow) Many times
Stop 13 Steam going thru p-452 → T-9, Also steam upstair centrifuge going
14 to T-9. (DONE)
15 Pumping T-304B → T-304C (Take T-304B to 10%)
16 Took required samples: T-9, T-363A & D, P-415, T-304A, B, P-452
17 Feed is on from T-304A → p-452 → T-9 at 2:40 A.M
18 Took sample to the lab
19 Cleaned P. Plant office
20

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF			
||	0	|	0	0	||||||	0	0	0

LEVELS			
T-9	38	311B	19
304A	72	312B	47
304B	18	331A	53
304C	74	363A	66
306C	26	363D	91

COILS			
304A	9	363A	0
304B	3	363D	2
304C	3	306C	7
T-9	7		

NEWFORMS
Oil and Tar oper log

Revised on 9/16/04 MF
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DATE 3-15-06 TURN 7-3 OPERATOR Bob Kearns

OIL AND TAR OPERATION LOG

1 Tar System is: ON, feed from T-304A → P-452 → T-9.
2 Tanks with mixers are: T-363 D
3 Tanks recycling are: T-9, T-363A + D,
4 Preheater temps are: T-9 IN 106 OUT 108
5 Loading trucks from: T-9, T-363A + T-311. P-425 → T-312.
6 Drained gas mains.
7 Ran T-363A mixer for 5 mins 6:35 → 6:40 AM.
8 Open to line up + help with cooler change.
9 STOP pumping T-304B → T-304C.
10 Pumped pitch stripper, (Used P-405B)..
11 Pin pumping oil into system from T-331. (DONE AT 9:35AM)
12 Have 4 steams ON P-207C + line to T-304C (2-UPSTAIRS + 2 DOWN)
13 Checked T-304A for water found NONE at 9:40AM - TARON third,
14 GAS ON fourth cock.
15 Have 2 = 400 pumps ON to keep good recycle flow.
16 Cleaned up around phenol drum area.
17
18
19 EMPTY tar bucket by P-207C.
20

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF		F331	
IIIIII	Ø	Ø	Ø	517 I	II	Ø	Ø	II

LEVELS			
T-9	38	311B	19
304A	69	312B	50
304B	14	331A	48
304C	77	363A	55
306C	27	363D	91

COILS			
304A	9	363A	0
304B	3	363D	2
304C	3	306C	7
T-9	7		

NEWFORMS
Oil and Tar pper log

Revised on 9/16/04 MF
13140130.frm

DATE 3-15-06 TURN 3-11 OPERATOR T-Cargle

OIL AND TAR OPERATION LOG

1 Tar System is: Dm feed from T-304A → P-452 → T-9
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9, T-363A & D
4 Preheater temps are: T-9 IN 106 OUT 108
5 Loading trucks from: T-9, T-363A & T-311. P-425 → T-312
6 Drained Gas mains
7 No Draining on T-304A or T-304C
8 Both 400 pumps are running
9 Ran mixer on T-363A for 5 mins 3:40p to 3:45p
10 went to Line up, Help with Cooler Change
11 Pumped Chloride Empty
12 Mopped distillation building floor
13
14
15 (D)
16
17
18
19
20

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF			
0	0	11	0	0	11	0	0	0

LEVELS			
T-9	29.6	311B	12.6
304A	62.5	312B	52.8
304B	18.5	331A	48.3
304C	77.8	363A	53
306C	86.5	363D	91.3

COILS			
304A	9	363A	0
304B	3	363D	2
304C	3	306C	7
T-9	7		

NEWFORMS
Oil and Tar oper log

Revised on 9/16/04 MF
13140130.frm

DATE 3/16/06 TURN 11-7 OPERATOR E. Moore

OIL AND TAR OPERATION LOG

1 Tar System is: On feed from T-304A → P-452 → T-9
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9, T-363A & D
4 Preheater temps are: T-9 in 110° out 112°
5 Loading trucks from: T-9, T-363A, T-311 P-425 → T-312
6 Went to line up, helped w/cooler change
7 Ran T-363A mixer for 5 mins.
8 Drained gas mains
9 Took samples: T-9, T-363A & D, P-415, P-452, T-304A & B
10 Pumped pitch stripper empty w/P-405B (2X's)
11 Pumped centrifuge sump empty
12 Steamed & Bled on phenol pump (suction discharge line plugged)
13 Shut off 6 steams going to T-304C. (3 at tank + 3 in centrifuge)
14 Dumped tar bucket under T-363A mixer.
15 Still have both 400 pumps on STOPPED 400 West Pump is on. Took tes 400 ot
16 Took samples to the lab.
17 Cleaned up around phenol pump area
18
19
20

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF			
|||	0	0	0	0	|||||	0	0	0

LEVELS			
T-9	40	311B	11
304A	64	312B	56
304B	21	331A	48
304C	77	363A	45
306C	26	363D	91

COILS			
304A	9	363A	0
304B	3	363D	2
304C	3	306C	7
T-9	7		

NEWFORMS
Oil and Tar oper log

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DATE 3-16-06 TURN 7-3 OPERATOR Bob Kearly

OIL AND TAR OPERATION LOG

Tar System is: ON, feed from T-304A → P-452B → T-9.
Tanks with mixers are: T-363D
Tanks recycling are: T-9, T-363A + T-363D
Preheater temps are: T-9 IN 114 OUT 116
Loading trucks from: T-9, T-363A + T-311. P-425 → T-312.
Ran T-363A mixer for 5 mins 6:35 → 6:40 AM.
Drained gas mains.
When to line up + help with cooker change.
Checked T-304A + B for water found NONE at 7:40 AM,
Checked T-304C for water draining at #6 cock 9:30 AM,
Have HOLE in 484 control valve, running THRU by-pass valve
to T-9. "I took steam hose to steam line, line is clear now
PHENOL PUMP STILL LEAKING + PLUGGING UP, NEED NEW
PUMP + DISCHARGE NEEDS TO BE INSULATED." ?? WHEN
Pumped pitch stripper, using P-405B.
Caught a mouse, empty trap out into garbage can.

START Pumping T-304C then preheater → T-301 2:00 PM
Emptied wheelbarrow at P-405, & into box at truck washed,
Emptied tar bucket at P-204A + by box.

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF		T-331	
1111	~~0~~	1	~~0~~	T-306C 1	~~0~~	~~0~~	~~0~~	11

LEVELS			
T-9	39	311B	7
304A	61	312B	58
304B	26	331A	48
304C	75	363A	37
306C	28	363D	91

COILS			
304A	9	363A	0
304B	3	363D	2
304C	3	306C	7
T-9	7		

NEWFORMS
Oil and Tar oper log

Revised on 9/16/04 MF
13140130.frm

DATE 3-16-06 TURN 3-11 OPERATOR T-Cargle

OIL AND TAR OPERATION LOG

1 Tar System is: On feed from T-304A → P452B → T-9
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9, T-363A-D
4 Preheater temps are: T-9, In 114° Out 116
5 Loading trucks from: T-9, T-363A, T-311 P425 → T-312
6 Drained Both Gas Mains
7 Draining water T-304C @ 6 Cock 3:15p, 7:35p
8 No Draining on T-304A,B 3:10, 9:00p
9 Ran mixer on T-363A 5 mins 2:30p to 2:35p
10 Went to Line up, Helped with Cooler Change
11 Maint. Changed out Control Valve on the
12 V84 & Put back on line.
13 Still Pumping T-304C thru Preheater → T-301
14 P.O pumped oil into System 4:00p to 7:00p
15 Pumped Chloride Empty
16
17
18
19
20

KW

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF	331		
0	0	0	0	0	1	0	1	0

LEVELS			
T-9	41	311B	7
304A	60	312B	61
304B	30	331A	58
304C	69	363A	37
306C	28	363D	91

COILS			
304A	9	363A	0
304B	3	363D	2
304C	3	306C	7
T-9	7		

NEWFORMS
Oil and Tar oper log

Revised on 9/16/04 MF
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DATE 3/17/06 TURN 11-7 OPERATOR E. Moore

OIL AND TAR OPERATION LOG

1 Tar System is: On feed from T-304A → P-452 → T-9
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9, T-363 A&D
4 Preheater temps are: T-9 in 116° out 118° T-304C in 90° out 92°
5 Loading trucks from: T-9, T-363A, T-311 P-425 → T-312
6 Went to line-up, helped w/cooler change
7 Took samples: T-9, T-363A,D, T-304A,B,C, P-415, P-452, + (2) P-302's
8 Ran T-363A mixer for 5 mins 10:45-10:50 p.m.
9 Pumped pitch stripper empty w/ P-405B (2 hrs)
10 Drained gas mains
11 Pumping T-304C → preheater → T-301
12 Stopped draining water off of T-304C at 11:40 p.m.
13 Straining & bleeding on phenol pump (discharge line keep
14 plugging up).
15 Took samples to lab
16 Cleaned up around P-405 A&B
17 Cleaned P. Plant office
18
19
20

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF			
1	0	0	0	0	1111	0	0	0

LEVELS			
T-9	42	311B	8
304A	57	312B	64
304B	33	331A	58
304C	58	363A	35
306C	88	363D	91

COILS			
304A	9	363A	0
304B	3	363D	2
304C	3	306C	7
T-9	7		

NEWFORMS
Oil and Tar oper log

Revised on 9/16/04 MF
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DATE 3-17-06 TURN 7-3 OPERATOR Bob Kearly

OIL AND TAR OPERATION LOG

1 Tar System is: ON, feed from T-304A → P-452 → T-9.
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9, T-363A + T-363D.
4 Preheater temps are: T-9 IN 116 OUT 118 T-304C IN 90 OUT 92
5 Loading trucks from: T-9, T-363A + T-311. P-425 → T-312.
6 Ran T-363A mixer for 5 mins 6:40 → 6:45 AM.
7 Drained gas mains.
STOP Still pumping T-304C thru preheater → T-301.
9 Put T-306C in for feed. AT 9:35 AT for 12 hours.
10 There is a leak at bottom of phenol drum.
11 Pumped centrifuge sump empty.
12 Pumped chloride drum empty.
13 Pumping pitch stripper.
14
15 Put feed back to T-304A at 11:30 AM → T-9.
16
17
18
19
20

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF		T-331	
111	0	~~0~~	~~0~~	T-306C 1	11	~~0~~	~~0~~	11

LEVELS			
T-9	42.47	311B	7.62
304A	55.12	312B	66.06
304B	37.58	331A	57.75
304C	54.75	363A	28.06
306C	27.03	363D	91.14

COILS			
304A	9	363A	0
304B	3	363D	2
304C	3	306C	7
T-9	7		

NEWFORMS
Oil and Tar oper log

Revised on 9/16/04 MF
13140130.frm

DATE 3-17-06 TURN 3-11 OPERATOR Bob Kearly

OIL AND TAR OPERATION LOG

Tar System is: ON feed from T-304A → P-452B → T-9.
Tanks with mixers are: T-363D.
Tanks recycling are: T-9, T-363A + T-363D.
Preheater temps are: T-9 IN 118 OUT 120
Loading trucks from: T-9, T-363A + T-311. P-425 → T-312.
When to line up + help with cooler change.
Discharge valve + line where plug on P-400 east, open
now + on line. Both 400 pumps where vibrate tested,
next 400 pump is OFF + leaking sum + vibrate bad.

Ran T-363A mixer for 5 mins. 6:20 PM → 6:25 PM.
Put 2 steam coils on T-363A.
Empty tar bucket at T-363A mixer - had WATER + TAR.
The other 4 steam coils on T-363A have HOLES IN THEM.

LOADING PC TAR OUT "T-363 D" - "NOW"

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF		T-331	
Ø	Ø	Ø	Ø	Ø	11	Ø	Ø	Ø

LEVELS			
T-9	43	311B	8
304A	52	312B	68
304B	43	331A	58
304C	55	363A	28
306C	26	363D	91

COILS			
304A	9	363A	2
304B	3	363D	2
304C	3	306C	7
T-9	7		

NEWFORMS
Oil and Tar oper log

Revised on 9/16/04 MF
13140130.frm

DATE 3/18/06 TURN 11-7 OPERATOR E. Moore

OIL AND TAR OPERATION LOG

1 Tar System is: On feed from T-304A → P-452 → T-9
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9, T-363A & D
4 Preheater temps are: T-9 in 120° out 122°
5 Loading trucks from: T-9, T-363D, T-311 P-425 → T-312
6 Ran T-363A mixer for 5 mins.
7 Took samples: T-9, T-363A & D, P-415, P-452, T-304A,B
8 Went to line up, helped w/cooler change
9 Drained gas mains
10 Pumped pitch stripper empty w/ P-405B
11 Cleaned up around P-405A & B
12 Pumped centrifuge pump empty
13 Took samples to lab
14 Cleaned P. Plant office (swept floor + cleaned desk)
15
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PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF			
0	1	0	0	0	1	0	0	0

LEVELS			
T-9	44.4	311B	7.7
304A	48.7	312B	71.2
304B	48	331A	57.7
304C	54.8	363A	28
306C	26.5	363D	88.8

COILS			
304A	9	363A	2
304B	3	363D	2
304C	3	306C	7
T-9	7		

NEWFORMS
Oil and Tar oper log

Revised on 9/16/04 MF
13140130.frm

DATE 3-18-06 TURN 1-3 OPERATOR Flargle
MANAGER

OIL AND TAR OPERATION LOG

1 Tar System is: On feed from T-304A → P-452 → T-9
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9, T-363A+D
4 Preheater temps are: T-9, IN 122° OUT 124°
5 Loading trucks from: T-9, T-363D, T-311 P-425 → T-312
6 Drained Gas Mains
7 no water draining on T-304A, B or C
8 Went to Line up, helped with cooler change
9 P.O pumping oil into system 9:45A to 12:25P
10 Picked up trash around T-363D also removed
11 as much tar from containment area around
12 T-363D, Put coal fines over the rest.
13 Cleaned the P-Plant office (Swept floor + Cleaned Desk.
14 Also reviewed more JQR Procedures.
15 Ran mixer on T-363A for 5 mins
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PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF			
0	1	0	0	0	1111	0	0	0

LEVELS			
T-9	44	311B	8
304A	45	312B	73
304B	52	331A	54
304C	55	363A	28
306C	27	363D	86

COILS			
304A	9	363A	2
304B	3	363D	2
304C	3	306C	7
T-9	7		

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Location: Doc Management

DATE 3-18-06 TURN 3-11 OPERATOR N. Jones
MANAGER D.D + R.V.

OIL AND TAR OPERATION LOG

1 Tar System is: on Feed From T-304A → P-452 → T-9
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9, T-363A+D
4 Preheater temps are: T-9 In 122° out 124°
5 Loading trucks from: T-9, T-363D, T-311 P-425 → T-312
6 Drained Gas Mains
7 Went to line-up Helped with Cooler Change
8 Ran Mixer on T-363A for 5 mins
9 Phenol Drum has hole in it at the bottom near gauge
10 Helped with second cooler change
11 Did House Keeping in Distillation pump room
12
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PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF			
0	0	0	0	0	1	0	0	0

LEVELS			
T-9	46	311B	8
304A	41	312B	76
304B	58	331A	54
304C	55	363A	28
306C	26	363D	86

COILS			
304A	9	363A	2
304B	3	363D	2
304C	3	306C	7
T-9	7		

Location: Doc Management

Revised on 1/20/06
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DATE 8/19/06 TURN 11-7 OPERATOR E. Moore
MANAGER K. V.

OIL AND TAR OPERATION LOG

1 Tar System is: On feed from T-304A → P-452 → T-9
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9, T-363A & D
4 Preheater temps are: T-9 in 122° out 124°
5 Loading trucks from: T-9, T-363D, T-311 P-425 → T-312
6 Ran T-363A mixer for 5 mins. 10:25 - 10:30 p.m.
7 Took samples: T-9, T-363A, D, T-304 A, B, P-415, P-452
8 Drained gas mains
9 Pumped chloride empty & adjusted packing (Leaking)
10 Pumped pitch stripper empty w/ P-405B
11 Went to line up, helped w/cooler change
12 Cleaned up around P-405 A & B
13 Took samples to lab
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PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF	T-331		
Θ	Θ	Θ	Θ	Θ		Θ	Θ	Θ

LEVELS			
T-9	47	311B	8
304A	38	312B	74
304B	63	331A	54
304C	65	363A	28
306C	26	363D	86

COILS			
304A	9	363A	2
304B	3	363D	2
304C	3	306C	7
T-9	7		

Location: Doc Management

Revised on 1/20/06
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DATE 3-19-06 TURN 7-3 OPERATOR T-CARGLE
MANAGER

OIL AND TAR OPERATION LOG

1 Tar System is: Down COLD HOLE In Line
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9, T-363A&D
4 Preheater temps are: T-9 In 124 out 126
5 Loading trucks from: T-9, T-363D, T-311 P-425 -> T-312
6 Drained Gas mains (2X)
7 No Draining on T-304A, B or C
8 Pumped centrifuge sump-empty
9 Had to take Dehydrated drum Cold Hole
10 In line
11 need to steam each pass threw out the turn
12 Steam going threw west pass from P-400 pumps
13 Steaming on P-452 -> T-9
14 Steam on P-304A going to 427
15 Went to line up, Help with cooler change
16 ran mixer on T-363A for 5 mins
17 Clean some Tar up around the H-400, Has more
18 to Clean up.
19
20

PC	
363A	363D
0	1

LIGHT OIL	
311	312
0	0

FRONT END OIL	
CHEM	BF
0							

WASH OIL	
0	0

T-9
0

LEVELS			
T-9	46	311B	8.18
304A	36.68	312B	81.29
304B	67.30	331A	54
304C	54.58	363A	27.77
306C	26.98	363D	84.10

COILS			
304A	9	363A	2
304B	3	363D	2
304C	3	306C	7
T-9	7		

Location: Doc Management

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DATE 3-19-06 TURN 3-11 OPERATOR N. Jones
MANAGER

OIL AND TAR OPERATION LOG

1 Tar System is: Down - Hole in Dehydrator Line
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9 T-363A+D
4 Preheater temps are: T-9 in 124° Out 126°
5 Loading trucks from: T-9, T-363D, T-311 P-425 → T-312
6 Drained Gas Mains
7 ~~[illegible]~~ Raw Mixer on T-363A 5mins
8 Went to line up helped with Cooler Change
9 Adjusting steam on passes through out the turn
10 Helped with second cooler Change
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PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF			
0	0	0	0	0	11	0	0	0

LEVELS			
T-9	47	311B	8
304A	36	312B	84
304B	72	331A	59
304C	55	363A	27
306C	26	363D	84

COILS			
304A	9	363A	2
304B	3	363D	2
304C	3	306C	7
T-9	7		

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Location: Doc Management

DATE 3-20-06 TURN 11-7 OPERATOR [illegible] MANAGER TED GROSS

OIL AND TAR OPERATION LOG

1 Tar System is: DOWN COLD HOLE IN PASS LINE
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9, T-363A + T-363D.
4 Preheater temps are: T-9 IN 124 OUT 126
5 Loading trucks from: T-9, T-363D + T-311, P-425 → T-312.
6 Drained gas mains.
7 Ran T-363A mixer for 5 mins. 10:30 → 10:35 PM.
8 Took samples off T-9, T-363A, T-363D, P-415, 2-P-302's, T-304A, T-3
9 and T-306C
10 Then to line up + help with cooler change.
11 Switching steam on NORTH + SOUTH passes all night
12 and heat steam on 400 PUMPS GOING TO WEST PASS.
13 P-425A → T-311.
14 At 3:00AM start pumping water off T-312.
15
16
17
18
19
20 Pick up samples took them to LAB.

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF			
X	1	1	X	X	1	X	X	X

LEVELS			
T-9	46.32	311B	7.14
304A	36.65	312B	78.66
304B	77.75	331A	54.16
304C	56.51	363A	27.42
306C	25.96	363D	82.10

COILS			
304A	9	363A	2
304B	3	363D	2
304C	3	306C	7
T-9	7		

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Location: Doc Management

DATE 3-20-06 TURN 7-3 OPERATOR T-CARGLE + BK
MANAGER D. D.

OIL AND TAR OPERATION LOG

1 Tar System is: DOWN COLD
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9, T-363A + T-363D
4 Preheater temps are: T-9 IN 124 OUT 126
5 Loading trucks from: T-363D, T-9 + T-312, P-425 → T-311
6 When to line up + help with cooler change,
7 Pumped chloride drum,
8 Drained gas mains,
9 Steaming on passes every hour,
10 Ran T-363A mixer for 5 mins
11 #2 pumptender Pumping T-2 → T-304A.
12 Corrosion Control working ON PHENOL DRUM LEAK.
13 Pumping T-363A to 304A. (EMPTY T-363A)
14 Pumped Centrifuge Sump Empty
15 Pumped flash drum empty.
[redacted] WHEN T-363A is DONE + STEAM OUT - START PUMPING T-304B;
17 T-304C and take T-304B down to 10%. [redacted]
18 Steaming Down To T-9
19
20 FRONT END OIL ½ into T-306C and ½ into 5+7. (1 truck.

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF			
Ø	11	Ø	11	T-306 1	11	Ø	Ø	11

LEVELS			
T-9	45	311B	10
304A	42	312B	74
304B	81	331A	54
304C	55	363A	15
306C	31	363D	78

COILS			
304A	9	363A	2
304B	5	363D	2
304C	3	306C	7
T-9	7		

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Location: Doc Management

DATE 3-20-06 TURN 3-11 OPERATOR N. Jones
MANAGER

OIL AND TAR OPERATION LOG

1 Tar System is: On Feed From T-363A → T-304A
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9, T-363A+D
4 Preheater temps are: T-9 in 124° out 126°
5 Loading trucks from: T-363D T-9, T-312 P425 → T-311
6 Went to line up & helped with cooler change
7 Drained Gas Mains
8 Steaming Passes every hour
9 Stopped pumping T-363A to T-304A steaming out line to
10 T-304A From T-363A steam on pump behind P.P. office
11 Pumping T-304B → T-304C
12 Cut steam back on T-304C going to T-306C
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PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF			
0	0	0	1	0	0	0	0	0

LEVELS			
T-9	45	311B	13
304A	56	312B	65
304B	85	331A	54
304C	55	363A	0
306C	28	363D	77

COILS			
304A	9	363A	0
304B	3	363D	2
304C	3	306C	7
T-9	7		

Revised on 1/20/06
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Location: Doc Management

DATE 3-21-06 TURN 11-7 OPERATOR Bob Hearly
MANAGER TED GROSS

OIL AND TAR OPERATION LOG

1 Tar System is: DOWN COLD
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9 + T-363D
4 Preheater temps are: T-9 IN 116 OUT 118
5 Loading trucks from: T-9, T-363D + T-312. P-425 → T-311.
6 Drained gas mains.
7 Steaming passes out every hour.
8 Took sample off T-9, T-363D, T-304A, T-304B, P-415B + 2-P-302.
9 #2 Pumptender pumping T-2 → T-304A.
10 STOP steaming from P-363B → T-304A.
11 Start pumping T-304B → T-304C at 1:40 AM.
12 Hook up steam to T-304C by MIXER.
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PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF			
Ø	|	Ø	|	Ø	|||||	Ø	Ø	Ø

LEVELS			
T-9	45	311B	15
304A	61	312B	60
304B	72	331A	47
304C	60	363A	0
306C	27	363D	75

COILS			
304A	9	363A	0
304B	3	363D	2
304C	3	306C	7
T-9	7		

Location: Doc Management

Revised on 1/20/06
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DATE 3-21-06 TURN 7-3 OPERATOR T-Cargle
MANAGER

OIL AND TAR OPERATION LOG

1 Tar System is: Down Cold
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9, T-363D
4 Preheater temps are: T-9 IN 118°, OUT 120°
5 Loading trucks from: T-9, T-363D & T-312. P425 → T-311
6 Drained Gas Mains
7 Draining water on T-304A @ 3rd cock (stopped)
8 Still pumping T-304B → T-304C
9 Still pumping T-2 → T-304A
10 Maint. working on H-400 Has another leak
11 Went to line up. Helped with cooler change
12
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PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF			
0	111	0	11	0	111111	0	0	0

LEVELS			
T-9	44	311B	18
304A	63	312B	52
304B	43	331A	48
304C	77	363A	0
306C	29	363D	66

COILS			
304A	9	363A	0
304B	3	363D	2
304C	3	306C	7
T-9	7		

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Location: Doc Management

DATE 3-21-06 TURN 3-11 OPERATOR T-Cargle
MANAGER

OIL AND TAR OPERATION LOG

1 Tar System is: Down Cold
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9, T-363D
4 Preheater temps are: T-9 In 120 out 122
5 Loading trucks from: T-9, T-363D & T-312 P425 → T-311
6 Drained Gas Manifold
7 No Draining on T-304A, B or C
8 Still pumping T-2 → T-304A
9 Still Pumping T-304B → T-304C (Stopped)
10 Main Still Gas H-400 lockout Can't Steam
11 passes
12 Went to Line up Help with Cooler Change
13 Cleaned P-Plant office
14 Pump Centrifuge Sump Empty
15
16
17
18
19
20

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF			
0	1	0	11	0	111	0	0	0

LEVELS			
T-9	44	311B	21
304A	67	312B	44
304B	24	331A	48
304C	89	363A	0
306C	29	363D	69

COILS			
304A	9	363A	0
304B	3	363D	2
304C	3	306C	7
T-9	7		

Location: Doc Management

Revised on 1/20/06
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DATE 3-22-06 TURN 11-7 OPERATOR Bob Kearly
MANAGER TED GROSS

OIL AND TAR OPERATION LOG

1 Tar System is: DOWN COLD
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9 + T-363D
4 Preheater temps are: T-9 IN 110 OUT 112
5 Loading trucks from: T-9, T-363D + T-312B, P-425 - T-311.
6 Ø mined gas mains.
7 #2 pumptender pumping T-2 ⇒ T-304A.
8 When to line up + help with cooler change.
9 Took sample off T-9, T-363D, T-304A, T-304B, T-304C + P-415B.
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PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF			
Ø	Ø	Ø	1	Ø	1111	Ø	Ø	Ø

LEVELS			
T-9	44	311B	23
304A	71	312B	38
304B	28	331A	48
304C	89	363A	0
306C	28	363D	63

COILS			
304A	9	363A	0
304B	3	363D	2
304C	3	306C	2
T-9	7		

Location: Doc Management

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DATE 3-22-06 TURN 7-3 OPERATOR T-Cargle
MANAGER

OIL AND TAR OPERATION LOG

1 Tar System is: Down Cold
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9, T-363D
4 Preheater temps are: T-9 In 108 out 110
5 Loading trucks from: T-9, T-363D & T-312: P425-T-311
6 Drained Gas mains
7 Draining T-304C @ 9th cock
8 Went to line up, Help with cooler change
9 Stopped pumping T-2 → T-304A
10
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PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF	T-331		
0	11/1111	0	1	1	1111	0	11	0

LEVELS			
T-9	43	311B	27
304A	73	312B	34
304B	33	331A	68
304C	88	363A	0
306C	32	363D	47

COILS			
304A	9	363A	0
304B	3	363D	2
304C	3	306C	7
T-9	7		

Location: Doc Management

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DATE 3/22/06 TURN 3-11 OPERATOR E. Moore
MANAGER K. V.

OIL AND TAR OPERATION LOG

1 Tar System is: Down Cold
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9, T-363D
4 Preheater temps are: T-9 in 108° out 110°
5 Loading trucks from: T-9, T-363D, T-312 p-425 → T-311
6 Went to line-up, helped w/ cooler change
7 Drained gas mains.
8 Cleaned up trash around east & west gas mains.
9 Cleaned tar up around above ground vent
10 Draining water off of T-304A @ 4th cock (started at 5:30p.m
11 Stopped draining water off of T-304C at 3:40p.m.
12 Pumped centrifuge pumps empty
13 Pumped pitch stripper empty w/ P-405B
14 Picked up trash by P-452's, put it in garbage can on road
15 Cleaned P. Plant office.
16 Went to storehouse to get water for P. Plant.
17
18 P-204A - needs new pressure gauge
19
20

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF	T-331		
0	1	0	11	0	1	0	0	0

LEVELS			
T-9	43	311B	29
304A	72	312B	25
304B	35	331A	82
304C	85	363A	0
306C	30	363D	44

COILS			
304A	9	363A	0
304B	3	363D	3
304C	3	306C	7
T-9	7		

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Location: Doc Management

DATE 3-23-06 TURN 11-7 OPERATOR Bob Hearly
MANAGER TED GROSS

OIL AND TAR OPERATION LOG

1 Tar System is: DOWN COLD
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9 + T-363D
4 Preheater temps are: T-9 IN 106 OUT 108
5 Loading trucks from: T-9, T-363D + T-312. P-425 → T-311.
6 When to line up + help primary with cooler change.
7 Took sample off T-9, T-363D, T-304A, T-304B, T-304C + P-415B.
8 Drained gas mains.
9 Draining water off T-304A at fourth cock.
10 Cleaning up on east side phenol drum.
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PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF			
∅	∅	∅	|	∅	||||||	∅	∅	∅

LEVELS			
T-9	43	311B	31
304A	72	312B	21
304B	41	331A	82
304C	87	363A	0
306C	30	363D	44

COILS			
304A	7	363A	0
304B	3	363D	2
304C	3	306C	7
T-9	7		

Location: Doc Management

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DATE 3-23-06 TURN 7-3 OPERATOR B.K. N.J.
MANAGER J.G.

OIL AND TAR OPERATION LOG

1 Tar System is: DOWN COLD
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9 + 363D.
4 Preheater temps are: T-91N 106 OUT 108
5 Loading trucks from: T-9, T-363D + T-312. P-425A → T-311B.
6 Drained Gas Mains
7 Went to Line-up + Helped with Cooler Change
8 Mopped floor in Distillation pump Room
9 Pumped centrifuge sump contents
10 Put new pressure gauges on P-204A + P-207C.
11 Still draining water off T-304A at fourth cock.
12 Cleaned up sum more around phenol room.
13 Resample T-304C for LAB. (JW)
14
15
16
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19
20

PC	
363A	363D
∅	1

LIGHT OIL	
311	312
∅	1

FRONT END OIL	
CHEM	BF
~~T-304C~~ 1	1

WASH OIL	
∅	

T-9
111

LEVELS			
T-9	41	311B	34
304A	73	312B	17
304B	46	331A	83
304C	87	363A	0
306C	33	363D	42

COILS			
304A	9	363A	0
304B	3	363D	2
304C	3	306C	7
T-9	7		

Location: Doc Management

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DATE 3/23/06 TURN 3-11 OPERATOR E. Moore
MANAGER K. V.

OIL AND TAR OPERATION LOG

1 Tar System is: Down
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9, T-363D
4 Preheater temps are: T-9 in 114° out 120°
5 Loading trucks from: T-9, T-363D, T-312 P-425 → T-311
6 Went to line-up, helped w/cooler change
7 Drained gas main. (2x's)
8 Pumped centrifuge sump empty
9 Draining water off of T-304C @ 6th cock
10 Pumped pitch stripper empty w/ P-405B
11 Cleaned up tar around above ground sump
12 Cleaned up around phenol drum (coke breeze)
13 Cleaned P. Plant office
14 T-304A not draining @ 4th cock
15
16
17
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19
20

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF	T-331		
0	0	0	11	0	11	0	0	0

LEVELS			
T-9	40	311B	36
304A	72	312B	8
304B	47	331A	75
304C	84	363A	0
306C	33	363D	42

COILS			
304A	9	363A	0
304B	3	363D	2
304C	3	306C	7
T-9	7		

Location: Doc Management

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DATE 3-24-06 TURN 11-7 OPERATOR Bob Hardy
MANAGER TED GROSS

OIL AND TAR OPERATION LOG

1 Tar System is: DOWN COLD
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9 + T-363D
4 Preheater temps are: T-9 IN 120 OUT 124
5 Loading trucks from: T-9, T-363D + T-312 P-425 → T-311
6 Drained gas mains
7 STOP draining water off T-304C at #6 cooler
8 Cleaned up around phenol drum
9 Took sample off T-9, T-363D, P-415B, P-302'4-2, T-304A, B + C
10
11
12
13
14
15
16
17
18
19
20 Took samples to LAB

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF			
Ø	//	Ø	/	Ø	//////	X	Ø	Ø

LEVELS			
T-9	41	311B	39
304A	72	312B	4
304B	54	331A	75
304C	82	363A	0
306C	33	363D	37

COILS			
304A	9	363A	0
304B	3	363D	2
304C	3	306C	7
T-9	7		

Location: Doc Management

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DATE 3-24-06 TURN 7-3 OPERATOR B.K. + N.J.
MANAGER Dont Know
TED GROSS

OIL AND TAR OPERATION LOG

1 Tar System is: DOWN COLD
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9 + T-363D
4 Preheater temps are: T-9 IN 124° OUT 126°
5 Loading trucks from: T-9, T-363D + T-312. P-425 → T-311.
6 Drained gas mains.
7 When to line up + help with cooler change.
8 Took sample off T-306C.
9 Cleaned up sum more around phenol drum + had box
10 change out.
11 Draining T-304C @ 5th cock
12
13
14
15
16
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PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF		T-331	
~~0~~	11		1	T-306C 1	11	~~0~~		11

LEVELS			
T-9	40	311B	41
304A	73	312B	0
304B	57	331A	75
304C	83	363A	0
306C	36	363D	35

COILS			
304A	9	363A	0
304B	5	363D	2
304C	3	306C	7
T-9	7		

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DATE 3-25-06 TURN 11-7 OPERATOR T-Cargle
MANAGER

OIL AND TAR OPERATION LOG

1 Tar System is: Down Cold
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9, T-363D
4 Preheater temps are: T-9, In 130 out 132
5 Loading trucks from: T-9, T-363D P-425-7T-311
6 Drained Gas Maine 11:30p, 3:30A
7 No Draining on T-304A&B
8 B04C Draining at 8th cock 11:50 - 3:20A
9 Went to Line up, help with cooler change
10 P.O pumping oil into system 1:15A to 4:00A
11 Swept and mopped distillation floor, from the
12 white double doors to the south Exit
13 Cleaned P-Plant Office
14 Took all required samples, T-363D, T-9, P425, T304A
15 T-304B, T-304C
16
17 Took samples to Lab
18
19
20

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF			
0	0	0	0	0	1	0	0	0

LEVELS			
T-9	40	311B	46
304A	71	312B	0
304B	65	331A	70
304C	76	363A	0
306C	36	363D	31

COILS			
304A	9	363A	0
304B	3	363D	2
304C	3	306C	7
T-9	7		

Location: Doc Management

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DATE 3/24/06 TURN 3-11 OPERATOR E. Moore
MANAGER K. V.

OIL AND TAR OPERATION LOG

1 Tar System is: Down Cold
2 Tanks with mixers are: T-363 D
3 Tanks recycling are: T-9, T-363 D
4 Preheater temps are: T-9 IN 126° out 130°
5 Loading trucks from: T-9, T-363D, P-425 → T-311
6 Went to line-up, helped w/cooler change
7 Drained gas mains.
8 Pumped centrifugal pump empty.
9 Draining water off of T-304C @ 7th cock
10 Draining water off of T-304B @ 6th cock (STOPPED @ 6:00)
11 Steaming P-405B (pitch stripper) (STOPPED)
12 Picked up trash around T-304B
13 Cleaned up around phenol drum (coke breeze)
14 Pumping pitch stripper empty w/P-405B
15 P-304B above ground sump needs pressure gauge
16 Cleaned P. Plant office
17
18
19
20

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF		T-331	
0	1	0	0	0	111	0	0	0

LEVELS			
T-9	40	311B	44
304A	72	312B	0
304B	60	331A	75
304C	79	363A	0
306C	35	363D	30

COILS			
304A	9	363A	0
304B	3	363D	2
304C	3	306C	7
T-9	7		

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Location: Doc Management

DATE 3/25/06 TURN 3-11 OPERATOR E. Moore
MANAGER K. V.

OIL AND TAR OPERATION LOG

1 Tar System is: Dowx Cold
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9, T-363D
4 Heater temps are: T-9 in 124° out 126° T-304C in 106° out 138°
5 Loading trucks from: T-9, T-363D p-425 → T-311
6 Went to line-up, helped w/cooler change
7 Drained gas mains (2x's)
8 Pumped centrifugal pump empty
9 Pumping T-304C → preheater → T-363A (50%, shut off)
10 Steaming out p-405 B (pitch stripper)
11 Put 1 Oil on T-304C (3 coils leaking, 1 coil valve will not op
12 Got hoses up on the 40 foot of distillation bldg.
13 Draining water off of T-304C @ 5th cock
14 Cleaned P. Plant office
15 Pumped Pitch stripper w/ p-405B @ 9:30 p.m.
16
17
18
19
20

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF	T-331		
⊖	⊖	⊖	⊖	⊖	‖	⊖	⊖	⊖

LEVELS			
T-9	38	311B	51
304A	72	312B	0
304B	72	331A	70
304C	66	363A	12
306C	35	363D	28

COILS			
304A	9	363A	0
304B	3	363D	1
304C	4	306C	7
T-9	7		

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Location: Doc Management

DATE 3-26-06 TURN 11-7 OPERATOR T-Cargle
MANAGER D.D

OIL AND TAR OPERATION LOG

1 Tar System is: Down Cold
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9, T-363D
4 Preheater temps are: T-9 IN 118 OUT 120 T-304C IN 106 OUT 146
5 Loading trucks from: T-9, T-363D P-425 → T-311
6 Drained Gas Mains @ 11:30p 5mins on each
7 no Draining on 304A, Tar @ 3rd cock 11:45p, + 3:40A
8 T-304B Draining water @ 6th cock 11:48p, + 3:43A
9 T-304C Draining water @ 7th cock 11:51P, + 3:46A
10 Went to Line up, Helped with cooler Change
11 Took all required samples, T-9, T-363D, P415
12 T-304A, T-304B + T-304C
13 Still Pumping T-304C → Preheater → T-363A (50% Shut off)
14 P.O pumping oil into system 4:10A
15 Re-Drained Gas Mains @ 4:00A 7mins on each
16 Swept + mopped distillation floor from the west
17 double doors to the north exit
18
19
20

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF			
0	0	0	0	0	1111	0	0	0

LEVELS			
T-9	39	311B	55
304A	73	312B	0
304B	74	331A	69
304C	60	363A	36
306C	36	363D	28

COILS			
304A	9	363A	0
304B	3	363D	1
304C	4	306C	7
T-9	7		

Location: Doc Management

Revised on 1/20/06
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Date 3-24-06

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OIL TAR
DAILY CHECK-OFF LIST

		Check Each Turn		
		1ST	2ND	3RD
1.	Check and review past 2 turns operating log sheets for changes in Process or equipment conditions.	✓	✓	✓
2.	Walk through - Visually check area and equipment for any spill, leaks or equipment failure at start of turn (inside and outside from Pitch Plant to Distillation area).	✓	✓	✓
3.	Check all safety equipment and devices for proper set up (include eye wash stations and safety showers) Report any abnormal conditions.	✓	✓	✓
4	Report any spills or leaks made or found through out turn.	✓	✓	✓
5.	Check all pumps and turbines for proper lubrication, unusual noises, or vibration.	✓	✓	✓
6.	Check all gauges (Pressure temperature and levels) for cleanliness and proper operation of needles. Change gauges or adjust temperature as needed.	✓	✓	✓
7.	Empty all tar buckets at end of shift, and report any full buckets found at start of shift.	✓	✓	✓
8.	Take all required samples (follow guide line sample sheet). Samples taken on 11-7 are: T-9, T-363D, T-304A, T-304B, T-304C, 2-P-302's & T-P-415B	YES	T-306C	N/A
9.	Check and drain gas main drains 2-times a turn during cold weather and log it once during warmer weather or as needed.	✓	✓	✓
10.	Check Tank (T-304A, B, C and T-306 C) for water each turn. Drain if needed.	✓	✓	✓
11.	Check all tanks on recycle for proper valve settings and operational mixers on for leaks and noises.	✓	✓	✓
12.	Work on assigned housekeeping area.	✓	✓	✓
13.	Make a personal report of general conditions for operator taking over shift (include any Maintenance or Contractor work going on etc., or any abnormal changes in operation)	✓	✓	✓
14	Check that all tar buckets have tar tags, fix the ones that don't have tags.	✓	✓	✓

* Bring this sheet to line up.

COMMENTS 3-11 P-304B above ground sump needs pressure gau

	Oil/Tar Initials	Mgr./TL Initials
11-7	B.K.	
7-3	N.J.	
3-11	E.M.	

By operator initial means that all listed items were done and management was informed of any problems / abnormalities.

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Date 3-27-06

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OIL TAR
DAILY CHECK-OFF LIST

		Check Each Turn		
		1ST	2ND	3RD
1.	Check and review past 2 turns operating log sheets for changes in Process or equipment conditions.	✓	✓	✓
2.	Walk through - Visually check area and equipment for any spill, leaks or equipment failure at start of turn (inside and outside from Pitch Plant to Distillation area).	✓	✓	✓
3.	Check all safety equipment and devices for proper set up (include eye wash stations and safety showers) Report any abnormal conditions.	✓	✓	✓
4	Report any spills or leaks made or found through out turn.	✓	✓	✓
5.	Check all pumps and turbines for proper lubrication, unusual noises, or vibration.	✓	✓	✓
6.	Check all gauges (Pressure temperature and levels) for cleanliness and proper operation of needles. Change gauges or adjust temperature as needed.	✓	✓	✓
7.	Empty all tar buckets at end of shift, and report any full buckets found at start of shift.	✓	✓	✓
8.	Take all required samples (follow guide line sample sheet). Samples taken on 11-7 are: T-9, T-363D, T-304A, T-304B + T-306 P-415B	YES	NA	N/A
9.	Check and drain gas main drains 2-times a turn during cold weather and log it once during warmer weather or as needed.	✓	✓	✓
10.	Check Tank (T-304A, B, C and T-306 C) for water each turn. Drain if needed.	✓	✓	✓
11.	Check all tanks on recycle for proper valve settings and operational mixers on for leaks and noises.	✓	✓	✓
12.	Work on assigned housekeeping area.	✓	✓	✓
13.	Make a personal report of general conditions for operator taking over shift (include any Maintenance or Contractor work going on etc., or any abnormal changes in operation)	✓	✓	✓
14	Check that all tar buckets have tar tags, fix the ones that don't have tags.	✓	✓	✓

* Bring this sheet to line up.

COMMENTS 3-11 Pressure gauge on P-204A is blown (Steam is coming out of it).

	Oil/Tar Initials	Mgr/TL Initials
11-7	BK *	[illegible]
7-3	TC *	
3-11	EM *	

* by operator initial means that all listed items were done and management was informed of any problems / abnormalities.

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Date 3-26-06 Rev. 1/20/06 13140121.frm

OIL TAR
DAILY CHECK-OFF LIST

		Check Each Turn 1ST	2ND	3RD
1.	Check and review past 2 turns operating log sheets for changes in Process or equipment conditions.	✓	✓	✓
2.	Walk through - Visually check area and equipment for any spill, leaks or equipment failure at start of turn (inside and outside from Pitch Plant to Distillation area).	✓	✓	✓
3.	Check all safety equipment and devices for proper set up (include eye wash stations and safety showers) Report any abnormal conditions.	✓	✓	✓
4	Report any spills or leaks made or found through out turn.	✓	✓	✓
5.	Check all pumps and turbines for proper lubrication, unusual noises, or vibration.	✓	✓	✓
6.	Check all gauges (Pressure temperature and levels) for cleanliness and proper operation of needles. Change gauges or adjust temperature as needed.	✓	✓	✓
7.	Empty all tar buckets at end of shift, and report any full buckets found at start of shift.	✓	✓	✓
8.	Take all required samples (follow guide line sample sheet). Samples taken on 11-7 are: T-9, T-363D, P415, T-304A T-304B + T-304C	yes ✓	NA	N/A
9.	Check and drain gas main drains 2-times a turn during cold weather and log it once during warmer weather or as needed.	✓	✓	✓
10.	Check Tank (T-304A, B, C and T-306 C) for water each turn. Drain if needed.	✓	✓	✓
11.	Check all tanks on recycle for proper valve settings and operational mixers on for leaks and noises.	✓	✓	✓
12.	Work on assigned housekeeping area.	✓	✓	✓
13.	Make a personal report of general conditions for operator taking over shift (include any Maintenance or Contractor work going on etc., or any abnormal changes in operation)	✓	✓	✓
14	Check that all tar buckets have tar tags, fix the ones that don't have tags.	✓	✓	✓

* Bring this sheet to line up.

COMMENTS 7-3 Have BLOW GASKET on line from P-309 to light oil decanter - TO pump water off T-311 or T-312. (MAINTS FIX GASKET)
7-3 STOP pumping T-304C TO T-363A at 10:15AM.

	Oil/Tar Initials	Mgr./TL Initials
11-7	TC *	
7-3	BK/NJ	
3-11	EM *	

by operator initial means that all listed items were done and management was informed of any problems / abnormalities.

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OIL TAR
DAILY CHECK-OFF LIST

		Check Each Turn		
		1ST	2ND	3RD
1.	Check and review past 2 turns operating log sheets for changes in Process or equipment conditions. 11-7 turn missing	✓	✓	NO
2.	Walk through - Visually check area and equipment for any spill, leaks or equipment failure at start of turn (inside and outside from Pitch Plant to Distillation area).	✓	✓	✓
3.	Check all safety equipment and devices for proper set up (include eye wash stations and safety showers) Report any abnormal conditions.	✓	✓	✓
4	Report any spills or leaks made or found through out turn.	✓	✓	✓
5.	Check all pumps and turbines for proper lubrication, unusual noises, or vibration.	✓	✓	✓
6.	Check all gauges (Pressure temperature and levels) for cleanliness and proper operation of needles. Change gauges or adjust temperature as needed.	✓	✓	✓
7.	Empty all tar buckets at end of shift, and report any full buckets found at start of shift.	✓	✓	✓
8.	Take all required samples (follow guide line sample sheet). Samples taken on 11-7 are: T-363D, T-9, P415, T-304A T-304B, T-304C	Yes	NA	N/A
9.	Check and drain gas main drains 2-times a turn during cold weather and log it once during warmer weather or as needed.		✓	✓
10.	Check Tank (T-304A, B, C and T-306 C) for water each turn. Drain if needed.	✓	✓	✓
11.	Check all tanks on recycle for proper valve settings and operational mixers on for leaks and noises.	✓	✓	✓
12.	Work on assigned housekeeping area.	✓	✓	✓
13.	Make a personal report of general conditions for operator taking over shift (include any Maintenance or Contractor work going on etc., or any abnormal changes in operation)	✓	✓	✓
14	Check that all tar buckets have tar tags, fix the ones that don't have tags.	✓	✓	✓

* Bring this sheet to line up.

COMMENTS 7-3 Took 1 steam coil off T-363D there is 1 coil ON. 3-11 Put 1 steam coil on T-304C (T-304C have 3 leaking coils + 1 coil valve does not open)

	Oil/Tar Initials	Mgr./TL Initials
11-7	TC *	
7-3	DK *	
3-11	EM *	

by operator initial means that all listed items were done and management was informed of any problems / abnormalities.

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OIL TAR
DAILY CHECK-OFF LIST

		Check Each Turn		
		1ST	2ND	3RD
1.	Check and review past 2 turns operating log sheets for changes in Process or equipment conditions.	✓	✓	✓
2.	Walk through - Visually check area and equipment for any spill, leaks or equipment failure at start of turn (inside and outside from Pitch Plant to Distillation area).	✓	✓	✓
3.	Check all safety equipment and devices for proper set up (include eye wash stations and safety showers) Report any abnormal conditions.	✓	✓	✓
4	Report any spills or leaks made or found through out turn.	✓	✓	✓
5.	Check all pumps and turbines for proper lubrication, unusual noises, or vibration.	✓	✓	✓
6.	Check all gauges (Pressure temperature and levels) for cleanliness and proper operation of needles. Change gauges or adjust temperature as needed.	✓	✓	✓
7.	Empty all tar buckets at end of shift, and report any full buckets found at start of shift.	✓	✓	✓
8.	Take all required samples (follow guide line sample sheet). Samples taken on 11-7 are: T-9, T-363A, T-304A, T-304B, T-304C, P-415b	YES	NA	NA
9.	Check and drain gas main drains 2-times a turn during cold weather and log it once during warmer weather or as needed.	✓	✓	✓
10.	Check Tank (T-304A, B, C and T-306 C) for water each turn. Drain if needed.	✓	✓	✓
11.	Check all tanks on recycle for proper valve settings and operational mixers on for leaks and noises.	✓	✓	✓
12.	Work on assigned housekeeping area.	✓	✓	✓
13.	Make a personal report of general conditions for operator taking over shift (include any Maintenance or Contractor work going on etc., or any abnormal changes in operation)	✓	✓	✓
14	Check that all tar buckets have tar tags, fix the ones that don't have tags.	✓	✓	✓

* Bring this sheet to line up.

COMMENTS 3-11 Cleaned up around phenol drum & cleaned tar up around above ground pump

	Oil/Tar Initials	Mgr./Tl. Initials
11-7	BK*	
7-3	NJ*	
3-11	EM*	

by operator initial means that all listed items were done and management was informed of any problems / abnormalities.

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OIL TAR
DAILY CHECK-OFF LIST

		Check Each Turn 1ST	2ND	3RD
1.	Check and review past 2 turns operating log sheets for changes in Process or equipment conditions.	✓	✓	✓
2.	Walk through - Visually check area and equipment for any spill, leaks or equipment failure at start of turn (inside and outside from Pitch Plant to Distillation area).	✓	✓	✓
3.	Check all safety equipment and devices for proper set up (include eye wash stations and safety showers) Report any abnormal conditions.	✓	✓	✓
4	Report any spills or leaks made or found through out turn.	✓	✓	✓
5.	Check all pumps and turbines for proper lubrication, unusual noises, or vibration.	✓	✓	✓
6.	Check all gauges (Pressure temperature and levels) for cleanliness and proper operation of needles. Change gauges or adjust temperature as needed.	✓	✓	✓
7.	Empty all tar buckets at end of shift, and report any full buckets found at start of shift.	✓	✓	✓
8.	Take all required samples (follow guide line sample sheet). Samples taken on 11-7 are: T-9, T-363D, T-304A, T-304B, P-415B & 2-P-302 A.	YES	N/A	N/A
9.	Check and drain gas main drains 2-times a turn during cold weather and log it once during warmer weather or as needed.	✓	✓	✓
10.	Check Tank (T-304A, B, C and T-306 C) for water each turn. Drain if needed.	✓	✓	✓
11.	Check all tanks on recycle for proper valve settings and operational mixers on for leaks and noises.	✓	✓	✓
12.	Work on assigned housekeeping area.	✓	✓	✓
13.	Make a personal report of general conditions for operator taking over shift (include any Maintenance or Contractor work going on etc., or any abnormal changes in operation)	✓	✓	✓
14	Check that all tar buckets have tar tags, fix the ones that don't have tags.	✓	✓	✓

* Bring this sheet to line up.

COMMENTS

	Oil/Tar Initials	Mgr./TL Initials
11-7	B.K. *	[illegible]
7-3	T.C. *	
3-11	T.C. *	

By operator initial means that all listed items were done and management was informed of any problems / abnormalities.

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Date 3-20-06 Rev. 1/20/06 13140121.frm

OIL TAR
DAILY CHECK-OFF LIST

		Check Each Turn		
		1ST	2ND	3RD
1.	Check and review past 2 turns operating log sheets for changes in Process or equipment conditions.	✓	✓	✓
2.	Walk through - Visually check area and equipment for any spill, leaks or equipment failure at start of turn (inside and outside from Pitch Plant to Distillation area).	✓	✓	✓
3.	Check all safety equipment and devices for proper set up (include eye wash stations and safety showers) Report any abnormal conditions.	✓	✓	✓
4	Report any spills or leaks made or found through out turn.	✓	✓	✓
5.	Check all pumps and turbines for proper lubrication, unusual noises, or vibration.	✓	✓	✓
6.	Check all gauges (Pressure temperature and levels) for cleanliness and proper operation of needles. Change gauges or adjust temperature as needed.	✓	✓	✓
7.	Empty all tar buckets at end of shift, and report any full buckets found at start of shift.	✓	✓	✓
8.	Take all required samples (follow guide line sample sheet). Samples taken on 11-7 are: T-9, T-363A, T-363B, T-304A, P-415 T-304B, T-306C & 2-P-302's	YES	NA	
9.	Check and drain gas main drains 2-times a turn during cold weather and log it once during warmer weather or as needed.	✓	✓	✓
10.	Check Tank (T-304A, B, C and T-306 C) for water each turn. Drain if needed.	✓	✓	✓
11.	Check all tanks on recycle for proper valve settings and operational mixers on for leaks and noises.	✓	✓	✓
12.	Work on assigned housekeeping area.	✓	✓	✓
13.	Make a personal report of general conditions for operator taking over shift (include any Maintenance or Contractor work going on etc., or any abnormal changes in operation)	✓	✓	✓
14	Check that all tar buckets have tar tags, fix the ones that don't have tags.	✓	✓	✓

* Bring this sheet to line up.

COMMENTS _____

	Oil/Tar Initials	Mgr./TL Initials
11-7	B.K.	T.G.
7-3	T.C.	+BK. DI
3-11	N.S.	

by operator initial means that all listed items were done and management was informed of any problems / abnormalities.

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Date 3/19/06

Rev. 1/20/06 13140121.frm

OIL TAR
DAILY CHECK-OFF LIST

		Check Each Turn		
		1ST	2ND	3RD
1.	Check and review past 2 turns operating log sheets for changes in Process or equipment conditions.	✓	✓	✓
2.	Walk through - Visually check area and equipment for any spill, leaks or equipment failure at start of turn (inside and outside from Pitch Plant to Distillation area).	✓	✓	✓
3.	Check all safety equipment and devices for proper set up (include eye wash stations and safety showers) Report any abnormal conditions.	✓	✓	✓
4	Report any spills or leaks made or found through out turn.	✓	✓	✓
5.	Check all pumps and turbines for proper lubrication, unusual noises, or vibration.	✓	✓	✓
6.	Check all gauges (Pressure temperature and levels) for cleanliness and proper operation of needles. Change gauges or adjust temperature as needed.	✓	✓	✓
7.	Empty all tar buckets at end of shift, and report any full buckets found at start of shift.	✓	✓	✓
8.	Take all required samples (follow guide line sample sheet). Samples taken on 11-7 are: T-9, T-363A&D, T-304A,B, P-415 P-452	✓	DM	✓
9.	Check and drain gas main drains 2-times a turn during cold weather and log it once during warmer weather or as needed.	✓	✓	✓
10.	Check Tank (T-304A, B, C and T-306 C) for water each turn. Drain if needed.	✓	✓	✓
11.	Check all tanks on recycle for proper valve settings and operational mixers on for leaks and noises.	✓	✓	✓
12.	Work on assigned housekeeping area.	✓	✓	✓
13.	Make a personal report of general conditions for operator taking over shift (include any Maintenance or Contractor work going on etc., or any abnormal changes in operation)	✓	✓	✓
14	Check that all tar buckets have tar tags, fix the ones that don't have tags.	✓	✓	✓

* Bring this sheet to line up.

COMMENTS 11-7 N/A

	Oil/Tar Initials	Mgr./TL Initials
11-7	E.M.*	[illegible]
7-3	IC *	[illegible]
3-11	NJ*	[illegible]

by operator initial means that all listed items were done and management was informed of any problems / abnormalities.

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Date 3/18/06

Rev. 12/17/99LM 13140121.frm

OIL TAR
DAILY CHECK-OFF LIST

		Check Each Turn		
		1ST	2ND	3RD
1.	Check and review past 2 turns operating log sheets for changes in Process or equipment conditions.	✓	✓	✓
2.	Walk through - Visually check area and equipment for any spill, leaks or equipment failure at start of turn (inside and outside from Pitch Plant to Distillation area).	✓	✓	✓
3.	Check all safety equipment and devices for proper set up (include eye wash stations and safety showers) Report any abnormal conditions.	✓	✓	✓
4	Report any spills or leaks made or found through out turn.	✓	✓	✓
5.	Check all pumps and turbines for proper lubrication, unusual noises, or vibration.	✓	✓	✓
6.	Check all gauges (Pressure temperature and levels) for cleanliness and proper operation of needles. Change gauges or adjust temperature as needed.	✓	✓	✓
7.	Empty all tar buckets at end of shift, and report any full buckets found at start of shift.	✓	✓	✓
8.	Take all required samples (follow guide line sample sheet). Samples taken on 11-7 are: T-9, T-363A, D, P-415, P-452, T-304 A, B	✓	N/A	N/A
9.	Check and drain gas main drains 2-times a turn during cold weather and log it once during warmer weather or as needed.	✓	✓	✓
10.	Check Tank (T-304A, B, C and T-306 C) for water each turn. Drain if needed.	✓	✓	✓
11.	Check all tanks on recycle for proper valve settings and operational mixers on for leaks and noises.	✓	✓	✓
12.	Work on assigned housekeeping area.	✓	✓	✓
13.	Make a personal report of general conditions for operator taking over shift (include any Maintenance or Contractor work going on etc., or any abnormal changes in operation)	✓	✓	✓
14	Check that all tar buckets have tar tags, fix the ones that don't have tags.	✓	✓	✓

* Bring this sheet to line up.

COMMENTS 11-7 N/A

	Oil/Tar Initials	Mgr./TL Initials
11-7	EM *	
7-3	T.C *	
3-11	NJ *	

* by operator initial means that all listed items were done and management was informed of any problems / abnormalities.

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Date 3/17/06

Rev. 12/17/99LM 13140121.frm

OIL TAR
DAILY CHECK-OFF LIST

		Check Each Turn		
		1ST	2ND	3RD
1.	Check and review past 2 turns operating log sheets for changes in Process or equipment conditions.	✓	✓	✓
2.	Walk through - Visually check area and equipment for any spill, leaks or equipment failure at start of turn (inside and outside from Pitch Plant to Distillation area).	✓	✓	✓
3.	Check all safety equipment and devices for proper set up (include eye wash stations and safety showers) Report any abnormal conditions.	✓	✓	✓
4	Report any spills or leaks made or found through out turn.	✓	✓	✓
5.	Check all pumps and turbines for proper lubrication, unusual noises, or vibration.	✓	✓	✓
6.	Check all gauges (Pressure temperature and levels) for cleanliness and proper operation of needles. Change gauges or adjust temperature as needed.	✓	✓	✓
7.	Empty all tar buckets at end of shift, and report any full buckets found at start of shift.	✓	✓	✓
8.	Take all required samples (follow guide line sample sheet). Samples taken on 11-7 are: T-9, T-363A, D, T-304A, B, C, P-415 P-452, + (2) P-302's	✓	NA	NA
9.	Check and drain gas main drains 2-times a turn during cold weather and log it once during warmer weather or as needed.	✓	✓	✓
10.	Check Tank (T-304A, B, C and T-306 C) for water each turn. Drain if needed.	✓	✓	✓
11.	Check all tanks on recycle for proper valve settings and operational mixers on for leaks and noises.	✓	✓	✓
12.	Work on assigned housekeeping area.	✓	✓	✓
13.	Make a personal report of general conditions for operator taking over shift (include any Maintenance or Contractor work going on etc., or any abnormal changes in operation)	✓	✓	✓
14	Check that all tar buckets have tar tags, fix the ones that don't have tags.	✓	✓	✓

* Bring this sheet to line up.

COMMENTS 11-7 Discharge line on phenol pump keep plugging up.
7-3 Cleaned up around phenol drum area + dumped into box by P-452's.

	Oil/Tar Initials	Mgr./TL Initials
11-7	E.M.*	
7-3	B.K.*	
3-11	*	

* by operator initial means that all listed items were done and management was informed of any problems / abnormalities.

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Date 3/16/06

Rev. 12/17/99LM 13140121.frm

OIL TAR
DAILY CHECK-OFF LIST

		Check Each Turn		
		1ST	2ND	3RD
1.	Check and review past 2 turns operating log sheets for changes in Process or equipment conditions.	✓	✓	✓
2.	Walk through - Visually check area and equipment for any spill, leaks or equipment failure at start of turn (inside and outside from Pitch Plant to Distillation area).	✓	✓	✓
3.	Check all safety equipment and devices for proper set up (include eye wash stations and safety showers) Report any abnormal conditions.	✓	✓	✓
4	Report any spills or leaks made or found through out turn.	✓	✓	✓
5.	Check all pumps and turbines for proper lubrication, unusual noises, or vibration.	✓	✓	✓
6.	Check all gauges (Pressure temperature and levels) for cleanliness and proper operation of needles. Change gauges or adjust temperature as needed.	✓	✓	✓
7.	Empty all tar buckets at end of shift, and report any full buckets found at start of shift.	✓	✓	✓
8.	Take all required samples (follow guide line sample sheet). Samples taken on 11-7 are: T-9, T-363 A&D, P415, P452 T-304 A, B	✓	NA	NA
9.	Check and drain gas main drains 2-times a turn during cold weather and log it once during warmer weather or as needed.	✓	✓	✓
10.	Check Tank (T-304A, B, C and T-306 C) for water each turn. Drain if needed.	✓	✓	✓
11.	Check all tanks on recycle for proper valve settings and operational mixers on for leaks and noises.	✓	✓	✓
12.	Work on assigned housekeeping area.	✓	✓	✓
13.	Make a personal report of general conditions for operator taking over shift (include any Maintenance or Contractor work going on etc., or any abnormal changes in operation)	✓	✓	✓
14	Check that all tar buckets have tar tags, fix the ones that don't have tags.	✓	✓	✓

* Bring this sheet to line up.

COMMENTS 11-7 N/A

	Oil/Tar Initials	Mgr./TL Initials
11-7	EM *	
7-3	BK *	
3-11	TC *	

* by operator initial means that all listed items were done and management was informed of any problems / abnormalities.

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Date 3/15/06

Rev. 12/17/99LM 13140121.frm

OIL TAR
DAILY CHECK-OFF LIST

		Check Each Turn		
		1ST	2ND	3RD
1.	Check and review past 2 turns operating log sheets for changes in Process or equipment conditions.	✓	✓	✓
2.	Walk through - Visually check area and equipment for any spill, leaks or equipment failure at start of turn (inside and outside from Pitch Plant to Distillation area).	✓	✓	✓
3.	Check all safety equipment and devices for proper set up (include eye wash stations and safety showers) Report any abnormal conditions.	✓	✓	✓
4	Report any spills or leaks made or found through out turn.	✓	✓	✓
5.	Check all pumps and turbines for proper lubrication, unusual noises, or vibration.	✓	✓	✓
6.	Check all gauges (Pressure temperature and levels) for cleanliness and proper operation of needles. Change gauges or adjust temperature as needed.	✓	✓	✓
7.	Empty all tar buckets at end of shift, and report any full buckets found at start of shift.	✓	✓	✓
8.	Take all required samples (follow guide line sample sheet). Samples taken on 11-7 are: T-9, T-363A/D, P-415, T-304A, B, P-450	✓	NA	NA
9.	Check and drain gas main drains 2-times a turn during cold weather and log it once during warmer weather or as needed.	✓	✓	✓
10.	Check Tank (T-304A, B, C and T-306 C) for water each turn. Drain if needed.	✓	✓	✓
11.	Check all tanks on recycle for proper valve settings and operational mixers on for leaks and noises.	✓	✓	✓
12.	Work on assigned housekeeping area.	✓	✓	✓
13.	Make a personal report of general conditions for operator taking over shift (include any Maintenance or Contractor work going on etc., or any abnormal changes in operation)	✓	✓	✓
14	Check that all tar buckets have tar tags, fix the ones that don't have tags.	✓	✓	✓

* Bring this sheet to line up.

COMMENTS 11-7 East 400 pump vibrates hard.

	Oil/Tar Initials	Mgr./TL Initials
11-7	EM *	
7-3	BK *	
3-11	TC *	

* by operator initial means that all listed items were done and management was informed of any problems / abnormalities.

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Date 3-14-06

Rev. 12/17/99LM 13140121.frm

OIL TAR
DAILY CHECK-OFF LIST

		Check Each Turn		
		1ST	2ND	3RD
1.	Check and review past 2 turns operating log sheets for changes in Process or equipment conditions.	✓	✓	
2.	Walk through - Visually check area and equipment for any spill, leaks or equipment failure at start of turn (inside and outside from Pitch Plant to Distillation area).	✓	✓	
3.	Check all safety equipment and devices for proper set up (include eye wash stations and safety showers) Report any abnormal conditions.	✓	✓	
4	Report any spills or leaks made or found through out turn.	✓	✓	
5.	Check all pumps and turbines for proper lubrication, unusual noises, or vibration.	✓	✓	
6.	Check all gauges (Pressure temperature and levels) for cleanliness and proper operation of needles. Change gauges or adjust temperature as needed.	✓	✓	
7.	Empty all tar buckets at end of shift, and report any full buckets found at start of shift.	✓	✓	
8.	Take all required samples (follow guide line sample sheet). Samples taken on 11-7 are: T-9, T-363A+D, P-302, P-415, T-306C, T-304A B +C	✓	NA	
9.	Check and drain gas main drains 2-times a turn during cold weather and log it once during warmer weather or as needed.	✓	✓	
10.	Check Tank (T-304A, B, C and T-306 C) for water each turn. Drain if needed.	✓	✓	
11.	Check all tanks on recycle for proper valve settings and operational mixers on for leaks and noises.	✓	✓	
12.	Work on assigned housekeeping area.	✓	✓	
13.	Make a personal report of general conditions for operator taking over shift (include any Maintenance or Contractor work going on etc., or any abnormal changes in operation)	✓	✓	
14	Check that all tar buckets have tar tags, fix the ones that don't have tags.	✓	✓	

* Bring this sheet to line up.

COMMENTS _____

	Oil/Tar Initials	Mgr./TL Initials
11-7	ND *	
7-3	Bill *	
3-11	*	

* by operator initial means that all listed items were done and management was informed of any problems / abnormalities.

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Date 3-13-06

Rev. 12/17/99LM 13140121.frm

OIL TAR
DAILY CHECK-OFF LIST

		Check Each Turn		
		1ST	2ND	3RD
1.	Check and review past 2 turns operating log sheets for changes in Process or equipment conditions.	✓	✓	✓
2.	Walk through - Visually check area and equipment for any spill, leaks or equipment failure at start of turn (inside and outside from Pitch Plant to Distillation area).	✓	✓	✓
3.	Check all safety equipment and devices for proper set up (include eye wash stations and safety showers) Report any abnormal conditions.	✓	✓	✓
4	Report any spills or leaks made or found through out turn.	✓	✓	✓
5.	Check all pumps and turbines for proper lubrication, unusual noises, or vibration.	✓	✓	✓
6.	Check all gauges (Pressure temperature and levels) for cleanliness and proper operation of needles. Change gauges or adjust temperature as needed.	✓	✓	✓
7.	Empty all tar buckets at end of shift, and report any full buckets found at start of shift.	✓	✓	✓
8.	Take all required samples (follow guide line sample sheet). Samples taken on 11-7 are: T-9, T-363 A+D, P-302, P-465, P-452 T-306c T-304 A B & C		NA	✓
9.	Check and drain gas main drains 2-times a turn during cold weather and log it once during warmer weather or as needed.	✓	✓	✓
10.	Check Tank (T-304A, B, C and T-306 C) for water each turn. Drain if needed.	✓	✓	✓
11.	Check all tanks on recycle for proper valve settings and operational mixers on for leaks and noises.	✓	✓	✓
12.	Work on assigned housekeeping area.	✓	✓	✓
13.	Make a personal report of general conditions for operator taking over shift (include any Maintenance or Contractor work going on etc., or any abnormal changes in operation)	✓	✓	✓
14	Check that all tar buckets have tar tags, fix the ones that don't have tags.	✓	✓	✓

* Bring this sheet to line up.

COMMENTS W

	Oil/Tar Initials	Mgr./TL Initials
11-7	NJ *	
7-3	B. K. *	
3-11	*	

* by operator initial means that all listed items were done and management was informed of any problems / abnormalities.

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Date 3-12-06

Rev. 12/17/99LM 13140121.frm

OIL TAR
DAILY CHECK-OFF LIST

		Check Each Turn		
		1ST	2ND	3RD
1.	Check and review past 2 turns operating log sheets for changes in Process or equipment conditions.	✓	✓	✓
2.	Walk through - Visually check area and equipment for any spill, leaks or equipment failure at start of turn (inside and outside from Pitch Plant to Distillation area).	✓	✓	✓
3.	Check all safety equipment and devices for proper set up (include eye wash stations and safety showers) Report any abnormal conditions.	✓	✓	✓
4	Report any spills or leaks made or found through out turn.	✓	✓	✓
5.	Check all pumps and turbines for proper lubrication, unusual noises, or vibration.	✓	✓	✓
6.	Check all gauges (Pressure temperature and levels) for cleanliness and proper operation of needles. Change gauges or adjust temperature as needed.	✓	✓	✓
7.	Empty all tar buckets at end of shift, and report any full buckets found at start of shift.	✓	✓	✓
8.	Take all required samples (follow guide line sample sheet). Samples taken on 11-7 are: T9, T-363A+D, P-415, P-452, T-304A,B,C, T-306C	Yes	N/A	N/A
9.	Check and drain gas main drains 2-times a turn during cold weather and log it once during warmer weather or as needed.	✓	✓	✓
10.	Check Tank (T-304A, B, C and T-306 C) for water each turn. Drain if needed.	✓	✓	✓
11.	Check all tanks on recycle for proper valve settings and operational mixers on for leaks and noises.	✓	✓	✓
12.	Work on assigned housekeeping area.	✓	✓	✓
13.	Make a personal report of general conditions for operator taking over shift (include any Maintenance or Contractor work going on etc., or any abnormal changes in operation)	✓	✓	✓
14	Check that all tar buckets have tar tags, fix the ones that don't have tags.	✓	✓	✓

* Bring this sheet to line up.

COMMENTS T-3 cleaned up by T-304B

→ Need to clean tar by P304A/B pump base on 3-11 turn

→ Start clean up by T9 pumps north side between on 11-7 turn

	Oil/Tar Initials	Mgr./TL Initials
11-7	N.J. *	
7-3	E.M. *	
3-11	JC *	

* by operator initial means that all listed items were done and management was informed of any problems / abnormalities.

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PAGE 1

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 1-20-06 13140102.fm

Date 3-12-06 Turn 11-7

Operator Bob Kearly Manager TED GROSS + K.V.

1. Jar Dehydrator on feed from T-304C thru preheater → P-452 → T-304C (FEED SET AT 70 GPM - LOWER FEED TO 50GPM AT 2:45AM).
2. Primary cooler change #5 ON, REV #4 + #6 OFF + rev liquor side #6. REV water #5
3. Final cooler change reversed WEST.
4. Pumptender stroker back flushed valves on #3, #4, #9, #10, 5+7N+S strainers.
5. Pumped oil into system from T-331.
6. Phenol drum ran over, because pump + line plug up. DISCHARGE -12.5 10.5
7. Lost liquor flow at 5+7 and liquor pressure 2 X's.
8. PIC 407 vent line showing 10.8 - 11.0 because back up from P.1
9. Pumping D-4 → T-2 at 4:20AM.
10. Pumping 5+7N → T-301 3:30AM.
11. Second cooler change at 5:00AM #6 ON, REV #5 + #4 OFF

Trucks

OVER

T9 (time) Ø

T363A Ø T363D Ø T311 Ø T312 Ø T331 Ø

Acid Ø Others B.F=1111

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PAGE 2

PLANT OPERATOR TURN REPORT COMMENTS Rev. 1-20-06 13140102.frm

Date 3-12-06 Turn 11-7

Operator Bob Kearly Manager J.G. + K.V.

12. RAN T-363A mixer for 5 mins.

13. PHENOL PUMP DISCHARGE LINE STILL NEEDS TO BE INSULATED

14. PHENOL PUMP IS STILL LEAKING.

15. Washed out ABSORBER MAN P-104B, P-104C, P-105B, P-105C + P-109A.

16.

Trucks

T9 (time) _____

T363A _____ T363D _____ T311 _____ T312 _____ T331 _____

Acid _____ Others _____

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Mar. 12. 2006 5:31AM No. 0707 P. 1

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 1-20-06 13140102.frm

Date 3-12-2006 Turn 2nd

Operator Sandra Manager K.V.

- Dehydrator on T304C going thru Preheater using P452 to T304C at 50 gpm
- Primary gear pump off at S.C. - on at 7:45 A.M. - off at 10:
- Stroked backflush valves 3+4, 9+10, 5+7
- Primary Cooler Change #4 on Rev. both sides of #6 + #5 off + Rev. West final plate cooler (2x)
- Washed up P109A, P104's + P105's
- Stopped pumping D4 to T2 at 9:45 A.M.
- Ran T363A mixer for 5 minutes

Trucks

T9 (time) _____

T363A _____ T363D _____ T311 _____ T312 _____ T331 1

Acid _____ Others B.F. - 111

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 1-20-06 13140102.frm

Date 3/12/06 Turn 2-10

Operator S. CLARK Manager D.D.

Cooler change (Pre) - #5-ON-Rev. #4 - #6-OFF-Rev. Lig.-side 4:30

" " (Final) - Rev. West Plate cooler (2-X)

Backflushed - 5/7-3/4-9/10 strainer Valves

Dehydrator on, T304-C → Preheater → P-452 → T304-C - 40 G.P.M.

Draining water off T304-A, 3rd drain

Pumped chloride drum - (3-X)

Worked-up 104' 105' + 109 pump.

Pumping 5/7 → T301 - stopped - steam out line - 8:PM

Trucks

T9 (time)

T363A 0 T363D 0 T311 1 T312 0 T331 0

Acid 0 Others 2-F.E.O. → B.F

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS Rev. 1-20-06 13140102.frm

Date 3-13-06 Turn 11-7

Operator Pino Manager DD/TG

1.) Dehydrator is on T-304-C → P-452 → T-304C (B-4 recycle)

2.) Switched feed to dehydrator to T-306-C going to T-304C for 2hrs 1215A + put on warm recycle 2:15A

3.) Adjusted water valve on E-416 at 11:10 pm valve was closed

4.) Shut off 302 Gear pump at 12:45A / Put back on at 4AM

5.) Washed up absorbers pumps at 1:15A

6.) Had primary operator put a little more steam on A+C primary coolers

7.) #2 operator pumped D-D4 → T2 + T-102A → T-2 (STOPPED)

8.) Draining T-304A at #3 (water)

9.) Have steam cracked on at P-452 → T-304C (off)

10.) Started pumping 5+7 at 3:15A → T-301

11.) Shut off Distillation sump pumps at 4:25 AM to lower levels in surge tanks. 78.19 LI 7825

Trucks:

T9 (time) Ø

T363A Ø T363D Ø T311 1 T312 Ø T331 Ø

Acid Ø Others FEO → BF-11

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PLANT OPERATOR TURN REPORT COMMENTS

Rev. 1-20-06 13140102.fm

Date 3-13-06 Turn 11-7

Operator [illegible] Manager DD/TG

12.) Foreman checked all MCC rooms for water all ok.
13.) Cooler change put #6 on, rev. both sides of #5 + ~~[illegible]~~ took 4 off. Rev. dip side of #4
14.) Removed west final plate cooler.
15.) Swept control room floor + cleaned up washroom.
16.) Pumped east sump to 371 S tank 5:15A

Trucks

T9 (time) _____

T363A _____ T363D _____ T311 _____ T312 _____ T331 _____

Acid _____ Others _____

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS Rev. 1-20-06 13140102.frm

Date 3/13/06 Turn 2ND

Operator B. McDowell Manager T.G.

Tar Dehydrator Down Steaming passes &
Pumping 452 to T-9 (Leak H-400)
Cooler Change #4 on Rev #6 #5 off Also Rev West
Fwals
Put FEO into 306C
Clear Liq in 5/7 Turbine at 7:15 am
5/7 South Strainer Down for MTCE To Repack
North Online (Completed) 12%
Puritech Switched Dewatering System from
#5 to #4 Exhauster.
427 Flow Meter Back in Service

Trucks

T9 (time) 2

T363A 6 T363D 0 T311 0 T312 0 T331 0

Acid 11 Others 1 FEO to 306C

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS Rev. 1-20-06 13140102.frm

Date 3/13/06 Turn 2-10

Operator J. CLARK Manager D.D.

Cooler change (Pri.) - #5 ON - Rev. #4 - #6 OFF - 4:30 / Rev. Liq. side #6 - 8:PM

" " (Final) - Rev. West plate cooler - (2-X)

Dehydrator down, steaming passes, also P452 → T9 / every Hour

Backflushed - 5/7 - 3/4 - 9/10 - strainer Valves.

Pumped oil into system - 4:15 → 7:35

Shut primary gear pump down 4:PM, put on at 8:20

Put 5/7 - south strainer on line, T-dling

Pumping T-2 → T-304-A - 6:10 → S.P.

" 5/7 → T-301 - 7:05 → S.P.

" T-304-C → T-363-A, Preheater - 7:50 → S.P. / fill to 90%

Steamed out pitch stripper

Trucks

T9 (time)

T363A 0 T363D 0 T311 1 T312 0 T331 0

Acid 11 Others 2 - F.E.O. → B.F.

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 1-20-06 13140102.frm

Date 3-14-06 Turn 7-11-7

Operator Piero Manager DD/

1.) Cooler change: put #6 on, rev. #5, took 4 off
2.) Final change: west final plate
3.) Dehydrator down, steaming on all passes every hour
4.) pumping T-304-C → T-363A till 90% (stopped) at 3AM
5.) Took off primary gear pump at 12 midnight.
6.) Put dist. sump pumps back in automatic.
7.) Steamed out discharge of Phenol pump was plugged. 1:30 AM
8.) Pumping T2 → T304A from shift change
9.) Wiped down controlers on boards (Panels)
10.) Cleaned up in restroom
11.) Gear pump back on at 5 AM

Trucks

T9 (time) Ø

T363A Ø T363D Ø T311 1 T312 Ø T331 Ø

Acid ~~Ø~~ 1 Others Ø

4 BF

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 1-20-06 13140302.frm

Date 3/14/06 Turn 2ND

Operator B. McDowell Manager T.G.

TAR Dehydrator Down Cold Repairing leak
MTCE Pulling P-400 EAST
Cooler Change #4 on Rev #6 Soff
Backflushed #9, 12 9+10, 5+7 Strainers
Pumping 304B to 304C 8:00 am
Stopped Pumping T2 to 304A At 12:34 pm
#2 Batt Did a Valve Body Job
Ran 302 Gear Pump 4 Hrs
Systems Reset Thermo Westronics Recorder for
#1 Exh Temps.

Trucks

T9 (time)

T363A 2 T363D 0 T311 0 T312 0 T331 0

Acid 11 Others 3 FEO to BF
1 FEO to #2 C.S

F:All_file/forms/hcwforms

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 1-20-06 I3140102.frm

Date 3/14/06 Turn 2-10

Operator J. CLARK Manager D.D.

Cooler change (PRI.) - #5-ON-Rev. 4:30 #4 - #6-OFF / Rev. Lyr-side 8:PM #6

" " (FINAL) - Rev. West Plate cooler - (2-X)

Pumping T-304-B → T-304-C - FROM LAST turn - 10%

Backflushed - 5/7-3/4-9/10 - strainer Valves

Steamed out all three passes, P-452 → T-9

Shut gear pump down, 4:PM, started back-up, 8:00

Pumping D-4 → T-2 - 8:50 →

System steam out PDI's, on B-final + C-sat. (OK)

Maints. finished, P-111-C

Put dehydrator on, 9:30, T-304-A → P-452 → T-9

Steam on bottom A/C primary cooler

Trucks

T9 (time) _____

T363A _____ T363D _____ T311 _____ T312 _____ T331 _____

Acid 11 Others _____

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 1-20-06 13140102.frm

Date 3/15/2006 Turn 1st

Operator Sandra Manager K.V.

- Stroked backflush valves - 3 & 4, 9 & 10, 5 & 7
- Stopped pumping D4 to T2 at 10:30 P.M.
- Pumping D102 to T2 at 11:00 P.M. - 1:35 A.M.
- Systems put in alarm for pitch. Stopped (at 15%)
- Cooler Change-over on Rev. both sides of #5 & #4 off & Rev. west final plate cooler (twice)
- Pumping T304B to T304C from S.C. to 10%
- Gear pump (Phi) off - 11:30 pm & on - 4:00 AM
- Pumped B-Benzol back into system
- Finished steaming P152 to T9 at 2:35 A.M.
- Dehydrator on T304A, P152 to T9 (40 gpm)
- * Floor cleaner needed & Mopped booster floor

Trucks

T9 (time) _____

T363A 11 T363D _____ T311 1 T312 _____ T331 _____

Acid _____ Others B.F. - IIIIII

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 1-20-06 13140102.frm

Date 3/15-2006 Turn 1st

Operator Sandra Manager K.V.

- Stroked backflush valves - 3+4, 9+10, 5+7
- Stopped pumping D4 to T2 at 10:30 P.M.
- Pumping D02 to T2 at 11:00 P.M. - 1:35 A.M.
- System put in alarm for pitch stripped (at 15%)
- Cooler Change - #1 on Rev. both sides of #5 + #4 off + Rev. west final plate cooler (twice)
- Pumping T304B to T304C from S.C. to 10%
- Gear pump (Pr.) off - 11:30 pm + on - 4:00 A.M.
- Pumped B Benzol back into system
- Finished stripping P452 to T9 at 2:35 A.M.
- Dehydrator on - T304 A, P452 to T9 (40 gpm)
- Floor cleaner needed & Mopped booster floor

Trucks

T9 (time) _____

T363A // T363D _____ T311 / T312 _____ T331 _____

Acid _____ Others B.E. - ////

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 1-20-06 I3140102.frm

Date 3/15/06 Turn 2ND

Operator B. McDowell Manager T.G

TAR Dehydrator on 304A → 462 → T-9

Cooler Change 40W Rev #6 #5 off & Rev W. Finals

Pumped 304B to 304C.

Systems checked East Hontoon + H.P.B. E+W.

Switched from WEST To East Hontoon

Pumped Oil Into System

1 Feed To 5/7

Backflushed #3+#4, #9+#10 + 5/7 Strainers

Trucks

T9 (time) _____

T363A 5 T363D 0 T311 0 T312 0 T331 0

Acid 0 Others 2 FEED RF
1 Chem 5/7

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 1-20-06 13140102.frm

Date 3/15/06 Turn 3rd

Operator E. Terry Manager Dabbs.

Cooler Change (Pri) #5 on #6 off Rev #4 Rev Liq. #6 at 8:00pm.

" " (Fin) Rev. West final cooler.

Dehydrator on. T304A → D452 → T9

Stroked 5+7, #3 & 4 and #9 & 10 backflush valves.

Had sucker truck on 3-11.

Pumping 5+7 → T301

Put 302 gear. on line at 8:00pm.

Washed up all absorber pumps.

Trucks

T9 (time) 0

T363A 0 T363D 0 T311 11 T312 0 T331 0

Acid 0 Others 11 B Fan

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 1-20-06 13140102.frm

Date 3-16-2006 Turn 1st

Operator Sandra Manager K.V.

- Stroked backflush valves - 3+4, 9+10, 5+7
- Pumping 5+7 to T301 from S.C.
- Dehydrator on T304 A, P452 to T9 (260gpm) using both #400 pumps
- Shut Primary Gear pump off at 11:15 - on at 4:00 a.m.
- Ran T363A mixer for 5 minutes
- Cooler Change - #6 on Rev both sides #5 + #4 off Rev. liq. side of #6 halfway thru turn + Rev. west final plate cooler
- Washed up P104's, P105's + P109A
- Ran west sump into pot

Trucks

T9 (time) _____

T363A 111 T363D _____ T311 _____ T312 _____ T331 _____

Acid Others B.F. - 10111

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS Rev. 1-20-06 13140102.frm

Date 3/16/06 Turn 2ND

Operator BMcDowell Manager T.G.

TAR Dehydrator on 304A #452 → T-9 25 GPM
Cooler Change #4 on Rev #6 #5 off Rev W. Finals
Systems Calibrated LEL Monitors + O2 Monitors
in Bst Bldg.
484 CV Spring a leak Systems Replacing Valve
Going Through bypass 9:20 am
Stroked #3+4, 9+10, 5/7 Backflush (Steamers)
Draining 304C from 6th
Put FEO into 304C
#7 Battery Dis. A Valve Body Job.

Trucks

T9 (time)

T363A 4 T363D 0 T311 1 T312 0 T331 0

Acid 0 Others 1 FEO to 304C

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 1-20-06 13140102.frm

Date 3/17/06 Turn 10-6

Operator S. CLARK Manager K. U.

Cooler change (Pri.) - #60N - Rev. #5 - #4 OFF / Rev. Liquid #4 12:30 4:20

" " (Final) - Rev. West plate cooler - (2-X)

Still pumping 5/7 → T301

" " T304C → T301

Dehydrator on, T304A → Preheater → P452 → T9 (30 G.P.M.)

Draining T304C, 6th drain - Stopped - 11:40

Backflushed - 3/4 - 9/10 - 5/7 - strainer Valves

Cleaned + Mopped control room floor + bath

Shut primary gear pump, 11:45, restarted 4:10 AM

Trucks

T9 (time)

T363A 1 T363D 0 T311 0 T312 0 T331 0

Acid 0 Others 4 - F.E.O. → B.F.

F:All_file/forms/newforms

Mar. 17. 2006 5:07AM No. 0808 P. 1

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 1-20-06 13140102.frm

Date 3/12/06 Turn 10-6

Operator S. CLARK Manager K. V.

Cooler change (Pri.) - #6 ON - Rev. #5 - #4 OFF / Rev. Liq-side #4 (12:30) (4:20)

" " (Final) - Rev. West plate cooler - (2-X)

Still pumping 5/7 → T-301

" " T304-C → T-301

Dehydrator on, T304-A → Preheater → P-452 → T9 (30-G.P.M.)

Draining T304-C, 6th drain - Stopped - 11:40

Backflushed - 3/4 - 9/10 - 5/7 - strainer Valves

Cleaned + Mopped control-room floor + bath

Shut primary gear pump, 11:45, restarted 4:10 AM

Trucks

T9 (time)

T363A 1 T363D 0 T311 0 T312 0 T331 0

Acid 0 Others 4 - F.E.O. → B.F.

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS Rev. 1-20-06 13140102.fm

Date 3/17/06 Turn 2ND

Operator B.McDowell Manager TG

Tank Dehydrator on 304A → 452 → T-9

Cooler Change H on Rev 6 #5 off. Also

Rev W Finals.

Back flushed 3/4, 9+10, 5/7 Strainers

Stopped Pumping 304C to 301

Put FEO into 304C

Flushed Dehydrator with 304C for 2HRS and

went back to 304A feed

Put Distillation Sumps in Auto

#2 Batt Dis n Valve body Job

Put 111C on for MTCE took 111A off Done

Put 111A on + Took 111C off

Leak on Bottom of Phenol Drum

Trucks Ran 302 Gear Pump 4HRS
Pumping 5/7 to 301

T9 (time)

T363A 3 T363D 0 T311 0 T312 0 T331 0

Acid 0 Others 2 BF
1 BF 306C

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS Rev. 1-20-06 13140102.fm

Date 3-17-06 Turn 3-11

Operator Piers Manager TG / KV

1.) Dehydrator is on T-304A → P452 → T9

2.) Cooler change - rev water side of #5 + put on, rev #4 + took #6 off.

3.) Final change rev west plate cooler.

4.) Backflushing 9+10, 3+4, 5+7 strainers

5.) Switched 400 pumps from west to east so vibrations can check it out - 3:15 pm still on the east (West + Leaking vibrating hard)

★ 6.) Switched loading from T-363A → T-363D (LOADING from T-363D)

7.) Put all coils on T-363A. Only 2 other 4 leak

8.) Took 302 gear pump off at 4:30PM

9.) Put 5+7 south strainer back on: 535PM (IDLE)

10.) Pumped oil into #1 booster 7:50 pm (done)

★ 11.) Still trying to pump 5+7 N down

12.) Cleaned off desk top + took out trash.

13.) Desulf pumped tar for 1/2 hour primary man oked

Trucks

T9 (time) Ø

T363A Ø T363D Ø T311 Ø T312 Ø T331 Ø

Acid Ø Others FEO → BF → 11

14.) Phenol drum has leak at thermocouple. Will fiberglass Monday.

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 1-20-06 13140102.frm

Date 3/18/06 Turn 1st.

Operator E. Terry Manager Kyle. V.

Cooler Change (Pri) #6 on #4 off Rev #5

" " (Fin) Rev. West final plate cooler.

Dehydrator on Feed 40gpm T304A → P452 → T9

Stroked 5 & 7, #3 & 4 and #9 & 10 backflush valves.

Pumped pitch stripper.

Washed up absorber pumps

Put 302 gal pump back online at 4:00pm.

Trucks

T9 (time) 0

T363A 0 T363D 1 T311 0 T312 0 T331 0

Acid 0 Others 1 BF

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 1-20-06 13140102.frm

Date 3/18/06 Turn 6-2

Operator J. CLARK Manager D.D.

Cooler change (Pri.) - #4 on Rev. #6 - 5 off / Rev. Liq. side #5 8:30 11:45

" " (Final) - Rev. West Plate cooler - (2-X)

Washed-up absorber pumps.

Backflushed - 5/7 - 3/4 - 9/10 - strainer Valves

Dehydrator on, T304A → P452 → T9 - 40 G.P.M.

Shut primary gear pump, down - 7:45 / put back on, 12:05

Pumped oil into system - 9:50 → 12:25

Trucks

T9 (time)

T363A 0 T363D 1 T311 0 T312 0 T331 0

Acid 0 Others 5-F.E.O. → B.F

F:All_file/forms/newforms

PG I

PLANT OPERATOR TURN REPORT COMMENTS Rev. 1-20-06 13140102.frm

Date 3-18-06 Turn 3-11

Operator Piers Manager DD/KV

1) Cooler change: cut #5 on rev #4 + took #6 off
2) Final change: rev west plate
3) Gear pump off at 350 pm
4) Maint finished with Baker pump at 5+7 at 330 pm
5) Stroked all backflush valves 3+4, 5+7, 9+10
6) Dehydrator is on T-304A → P-452 → T9 40 gpm
7) Temps on primaries were going up called for cooler change, then called load disp. to see if water press. had dropped off they said no approx 5:50 pm. Primary man said water control valve on roof was shut stroked valve & didn't help. Called systems at first they said control valve was bad then they determined it was moore controller, during this time turbines racked full open

Trucks

T9 (time) Ø

T363A Ø T363D Ø T311 Ø T312 Ø T331 Ø

Acid Ø Others BF-1

F:All_file/forms/newforms

Pg II

PLANT OPERATOR TURN REPORT COMMENTS Rev. 1-20-06 13140102.frm

Date 3-18-06 Turn 3-11

Operator Pries Manager DD/K ✓

+ suction went to (1) closed down on V-25 + brought suction back to 6 + machines went to normal.

8.) Checked V-25 for water (NONE), checked suction on #1 + #5

9.) Systems finished with plate cooler water moore controller analog output #1 was lead moved to analog output #2.

10) #2 cooler put 6 on rev lig side of #5 + water side of #5 + took #4 off 9:15 pm

11) BTU's are incorrect systems will calibrate later (Tucker) 9:15 pm

Trucks

T9 (time) _____

T363A _____ T363D _____ T311 _____ T312 _____ T331 _____

Acid _____ Others _____

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS Rev. 1-20-06 13140102.frm

Date 3/19/06 Turn 10-6

Operator J. CLARK Manager K.V.

12:30

Cooler change (PRI.) - #4 ON-Rev. #6 - #5 OFF / Rev. Liq. side #5 3:AM

" " (FINAL) - Rev. West plate cooler - (2-X)

Changed TIC-483-A set point - 165-170 - 10:30 (K.V.)

System change, inlet Gas flow set point alarm on #1 & #5 - EXH.

#1-30 → 25 / #5-20 → 15 (K.V.)

Dehydrator on, T-304-A → P-452 → T-9 - (40 G.P.M.)

Back flushed 3/4-9/10-5/7-strainer Valves

Shut steam off A-pri. cooler bottom / 3 thread on C-bottom 1:AM

Pumping 5/7 → T-301

System calibrated, pri. cooler, water control Valve, 1:45

" set V-25 alarm, to alarm above 25% open 2:AM

Cleaned booster control-room + bath

Trucks

T9 (time)

T363A 0 T363D 0 T311 0 T312 0 T331 0

Acid 0 Others 1-F.E.O. → B.F.

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 1-20-06 13140102.frm

Date 3/19/06 Turn 6-2

Operator J. CLARK Manager D.D.

8:30

Cooler change (Pri.) - #5-ON-Rev. #4-#6OFF / Rev. Liq-side #6

" " (Final) - Rev. West Plate cooler - (2.x)

Pumping 5/7 → T-301 - From Last Turn

Backflushed 3/4 - 9/10 - 5/7 - strainer Valves,

Dehydrator on, T304-A → P452 → T-9-40-G.P.M / Stopped - 9:00 AM

Hole IN LINE,

Cooler change (Pri.) - #6ON Rev. #5 - #4OFF

Trucks

T9 (time)

T363A T363D T311 T312 T331

Acid Others

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS Rev. 1-20-06 13140102.frm

Date 3-19-06 Turn 3-11

Operator Piers Manager DD/T.G.

1.) Dehydrator is down hole in line (pass).
2.) Stroked + flushed 9+10, 3+4 + 5+7 strainers
3.) Systems replaced moore controller for water valve on primary roof.
4.) Raised temp. at finals to 10° from Cnaph. scrubber.
5.) Dropped flair, east HPB to 7.2 & west HPB to 7.5
6.) 1st cooler change put #6 on rev. #5, took #4 off.
7.) 2ND cooler change Put #5 on rev liq side of #4 & water side took #6 off
8.) Steaming out all passes on H-400
9.) Took 30L gear pump off at 4PM put back on at 8:15PM
10.) Running pri coolers 29-30 per B ob. C.
11.) Check drains every hour on 1, 4, 5.

Trucks

T9 (time) Ø

T363A Ø T363D Ø T311 Ø T312 Ø T331 Ø

Acid Ø Others FEO → BF 11

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS Rev. 1-20-06 13140102.frm

Date 3/20/06 Turn 1

Operator B. McDowe Manager T. G.

Cooler Change Gon Rev #5 took #4 off & Reversed West Finals

Stroked 3&4, 9&10, 5&7 8 Traners

Tar Dehydrator Down Cold Rotated Steaming passes throughout Turn.

Pumping 5/7 to 0301

Ran 302 Gear Pump 4 Hrs

Pumping water off T-312 425 going to T311 (Done)

Trucks

T9 (time)

T363A 0 T363D 1 T311 2 T312 0 T331 0

Acid 0 Others 1 FEO to BF

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS Rev. 1-20-06 13140102.fmt

Date 3/30/06 Turn 6-2

Operator J. CLARK Manager D.D.

8:10 10:55

Cooler change (Pri.) - #4-ON-Rev. #6-#5-OFF / Rev. Liq-side #5

" " (Final) - Rev. West Plate cooler - (2-X)

Pumping 5/7 → F.301, from last turn-Stopped-9:00

Dehydrator still down cold, steaming passes

Backflushed 5/7-3/4-9/10-strainer Valves

Still pumping 102-A → T-2, from last turn

Put 1/2 F.E.O. into T-306-C 9:05 → 10:35 / 1/2 5/7

Gas blanket, put back in service 5/7-5-8:50

Pumping T-363-A → T-304-A-11:40 → S.P.

" T-2 → T-304-A-12:14 → S.P.

Had system change Moore controller, Water for pri. cooler temp.

System changed, set point on Dist. sump, from 3.0 → 4.0

press going to 1.0 when sump is pump.

Trucks

T9 (time) OVER

T363A 0 T363D 2 T311 0 T312 2 T331 0

Acid 1 Others 1-F.E.O. → CH

2

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS Rev. 1-20-06 13140102.frm

Date 3-20-06 Turn 3-11

Operator [illegible] Manager DD/TG

1.) Cooler change: put #5 on new lig + water on #4 took #6 off
2.) Final change: new west final plate cooler
3.) Backflushing 9+10, 3+4, 5
4.) Dehydrator is down cold due to hole in line steaming passes
5.) Put HPB back to original setpoint 7.5 east 7.8 west
6.) Pumping T2 → T-304A
7.) Corrosion control finished with Phenol Drum back on-line
8.) Closed flash drum vent valve
9.) Finished pumping 363A → T-304A 5:45 pm
10.) Took primary gas pump off at 4PM put back on at 8PM
11.) Had gas rescue drill at #2 boiler house. The horn doesn't work & phone doesn't work at rescue shanty. BY L100
12.) Took out trash & cleaned up restroom

Trucks

T9 (time) Ø

T363A Ø T363D Ø T311 Ø T312 1 T331 Ø

Acid 11 Others Ø

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 1-20-06 13140102.frm

Date 3-20-06 Turn 3-11

Operator [illegible] Manager DD/TG

13.) Dabby says "to have Plant operators & absorber operators to clean clean clean there will be a inspection".

14.) Start pumping T-304B → T-304C till 10% in B

15.) Washed all absorber pumps out.

Trucks

T9 (time) _____

T363A _____ T363D _____ T311 _____ T312 _____ T331 _____

Acid _____ Others _____

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS Rev. 1-20-06 13140102.frm

Date 3/21/06 Turn 1ST

Operator B. McDowell Manager T.G

TAR Dehydrator Down Cold Steam Rotated on Passes through out Turn.

Cooler Change #6 on Rev #5 #4 off Also Rev West Finals 2X

Pumping T2 to 304A

Pumping 304B to 304C at 1 41/Am

Backflushed 3+4, 9+10, 5/7 Strainers

Ran 302 Gear Pump 4hrs

Swept + Mopped Control Room Floor

Trucks

T9 (time) _____

T363A 0 T363D 1 T311 0 T312 1 T331 0

Acid 0 Others 4 FEO TO BF

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS Rev. 1-20-06 13140102.frm

Date 3/22/06 Turn 6-2

Operator J. CLARK Manager D.D.

Cooler change (Pri.) - #4 ON - Rev. #6 #5 OFF / Rev. Liq-side #5
" " (Final) - Rev. West plate cooler - (2-X)
Pumping D-4 → T-2 - Stopped - 7:40
" T-2 → T-304-A - Stopped - 7:30
Put P-105-A on, took P-105-B off (Maints.) - 11:25 / Ready 2:25
Draining T-304-C - 9th drain
System steamed out east Horton, checked west H.P.B.
also E.L.P.B.
Still steaming on suction main, basement + porch

Trucks

T9 (time)

T363A 0 T363D 8 T311 0 T312 1 T331 0

Acid 0 Others 4 - F.E.O. → B.F.
1 - F.E.O. → T306-C
2 - Wash oil

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS Rev. 1-20-06 13140102.frm

Date 3-22-06 Turn 3rd

Operator Sandra Manager K.V.

- Straked backflush valves - 3 & 4, 9 & 10, 5 & 7
- Shut down gear pump (Primary) - 3:45 p.m. - on at 7:45 p.m.
- Draining water T304A - 4th
- Cooler Change - #5 on Rev both sides of #4 & #6 o
& Rev. liquor side #6 halfway thru "turn" &
Rev. west plate cooler (2x)
- Still steaming on suction mains
- Cracked makeup bypasses at 1 & 2 p.h. at
- Washed up P104's & P105's & P109A

Trucks

T9 (time) _____

T363A _____ T363D 1 T311 _____ T312 11 T331 _____

Acid _____ Others B.F. 11

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS Rev. 1-20-06 13140102.frm

Date 3/23/06 Turn 1ST

Operator B. McDowell Manager T.G

TAR Dehydrator Down Cold.
Cooler Change #6 on Rev #5 Took #4 off also Rev
West Finals 2X
Stroked #3 & 4, #9 & 10, #5 & 7 Back flush Valves.
Moore Controller for V-75 went Bad causing valve
to close & loss off Suction, Hi Discharge PSI
for no less than 1 Min. Opened V-25 manually. Systems
Replace Controller (OK.) Hoppe, Barker, B. Lange Notified
Draining 304A from 4th.

Trucks

T9 (time) _____

T363A 0 T363D 0 T311 0 T312 1 T331 0

Acid 0 Others 5 FEO to BF

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 1-20-06 13140102.frm

Date 3-23-06 Turn 7-3

Operator Pierce Manager T.G./KV

1.) Cooler change: put #4 on took 5 off + rev. #6
2.) Final change: rev west final cooler (Plate)
3.) Stroked backflush 3+4, 9+10, 5+7 valves
4.) Had #2 operator open upon FIC 900 at #1 compressor. Call having systems check it out.
5.) Took 302 GP off at 9:00 am + put back on at 12 noon
6.) Mopped + swept control room floor
7.) Checked suctions + drained on ejectors
8.) Put steam on primary bottoms A+C 1½ threads each.
9.) Sampled D4 + T-304-C for lab.
10.) Put 1 front end oil into T-306-C
11.) Draining down level in B-benzol scrubber
12.) Maint took #4 ejector down to fix impeller line + steam flow.
13. Maint gave #4 back at 12:10pm now on idle

Trucks

T9 (time) 3

T363A Ø T363D 1 T311 Ø T312 1 T331 Ø

Acid Ø Others FEO → 306-C → 1
" → BF → 1

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PLANT OPERATOR TURN REPORT COMMENTS

Rev. 1-20-06 [3140102.frm

Date _____ Turn _____

Operator [illegible] Manager T.G./K.V.

14) Draining T-304A at 4th cook

15) Took 11 AM blowdown sample.

16) Put P-105B on & took 105A off at 2:15 PM.

Trucks

T9 (time) _____

T363A _____ T363D _____ T311 _____ T312 _____ T331 _____

Acid _____ Others _____

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PLANT OPERATOR TURN REPORT COMMENTS

Rev. 1-20-06 13140102.frm

Date 3-23-06 Turn 3rd

Operator Sandra Manager K.V.

- Stroked backflush valves - 3+4, 9+10, 5+7
- Pumped oil into system from T331 at 3:30 p.m. - 6:40 p.m.
- Steam on Primary bottoms 1/2 threads each
- Cooler Change - (Pri) #5 on Rev. both side #4 + #6 off
Rev. #6 liquor side halfway thru turn +
Rev. west final cooler plate
- Primary gear pump off at 5:00 p.m.
- Draining water - T304 C, 6th
- Pumping 5+7 to T301 at 5:15 p.m. + D4 to T2 at 9:40 p.
- Systems changed temp. + and - factor on
TIC 100 from +10 to +5 1/2 - * temps should
be maintained between 24 + 27 on Primarys +
finals will follow 7 1/2 degrees above Primarys
- Also disabled V-25 alarm (per Leo)

Trucks

T9 (time) _____

T363A _____ T363D _____ T311 _____ T312 11 _____ T331 _____

Acid _____ Others B.E. - 11

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PLANT OPERATOR TURN REPORT COMMENTS

Rev. 1-20-06 13140102.frm

Date 3-24-06 Turn 7-3

Operator Piers Manager TG / KV

1.) Cooler change: put #4 on, rev. #6 + took #5 off.
2.) Final change: rev. west final cool (Plate)
3.) Stroked backflush valves 9+10, 3+4, 5+7
4.) Had Multisew change box at P-452's
5.) Switched to east high press. bleeder at 8:50AM
6.) Switched back from east to west high press. bleeder.
7.) Put 1 load of Front End Oil into T-306-C
8.) Called Heniff Trucking to cancle light oil trucks.
9.) Draining T-304-C from #5
10.) Called systems to blow down inlet gas flow meters on #1 + #5 exausters. (done)
11.) Puritec man is here looking at exauster oils.

Trucks

T9 (time) 11

T363A ____ T363D 111 T311 Ø T312 1 T331 Ø

Acid Ø Others FEO → 306-C - 1
FEO → BF - 11

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PLANT OPERATOR TURN REPORT COMMENTS Rev. 1-20-06 13140102.frm

Date 3-24-06 Turn 3rd

Operator Sandra Manager K.V.

- Stroked backflush valves - 3+4, 9+10, 5+7
- Primary gear pump off at 3:45 p.m. - on at 7:45 p.m.
- Primary liquor turbine P100C + P100F on-line at 4:00 p.m. - P100B on idle
- Cooler Change - #5 on Rev. both sides of #4 + #6 off
  Rev. west final plate cooler (2x)
- Washed up P104's + P105's
- Turned steam supply off going to hot water tank at 6:45 p.m. - hot water temp close to 200°
- Draining water - T304B, 6th (stopped at 6:30) + T304C, 7th

Trucks

T9 (time)

T363A T363D / T311 T312 T331

Acid Others B.F. 111

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PLANT OPERATOR TURN REPORT COMMENTS

Rev. 1-20-06 13140102.frm

Date 3/25/06 Turn 10-6

Operator J. CLARK Manager D.D.

12:30 1:45

Cooler change (PRI.) - #6 ON Rev. #5 - #4 OFF / Rev. Lig. side #4

" " (FINAL) - Rev. West plate cooler - (2-X)

Draining Water from 7-30 & C-9th drain

Backflushed - 5/7-3/4-9/10 strainer Valves,

Shut primary gear pump down, 11:50 / put back on - 3:50 AM

Pumped oil into system - 1:20 → 4:AM

Steam on bottom of A/C - primary cooler

Cleaned control-room floor & bath

Trucks

T9 (time)

T363A 0 T363D 0 T311 0 T312 0 T331 0

Acid 0 Others 1-F.E.O. → B.F.

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PLANT OPERATOR TURN REPORT COMMENTS

Rev. 1-20-06 13140102.frm

Date 3-25-06 Turn 7-3

Operator Pierce Manager DD/KV

1) Boiler change put #4 on, rev #6;
2) Final change rev west plate (2x)
3) Maint working on dehydrator.
4) Backflushed all strainers 3+4, 9+10, 5+7
5.) Took gear pump (Primarys) off at 8am put back on at 11:30AM.
6.) Draining T-304C at #5 from bottom.
7.) Steam on primary bottoms A+C coolers
3.) When T-304-C quits draining, pump T-304C → T-363-A through the preheater.
9.) Washed up all absorber pumps.
10.) Cleaned up desk + microwave cart.
11.) Drained both gas main drains by finals.
12.) Took 2 final blowdown samples.

Trucks

T9 (time) 1 1

T363A Ø T363D 1 T311 Ø T312 Ø T331 Ø

Acid Ø Others BF-- FEO-- 1

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PLANT OPERATOR TURN REPORT COMMENTS

Rev. 1-20-06 13140102.frm

Date 3-25-2006 Turn 3rd

Operator Sandra Manager K.V.

- Stroked backflush valves - 3+4, 9+10, 5+7
- Took Primary gear pump off 3:45 p.m. + on at 8:00 p.m.
- Draining water - T304C, 5th (2:00 p.m.)
- Took 1 coil off of T363D - 1 still on
- Cooler change - #5 on Rev. #4 (both sides) + #6 off Rev. west final plate cooler (2x)
- Steam still on primary A/C bottoms
- Pumping T304C to T363A thru preheater at 4:40 p.
- Pumping 5+7 gear pump to T301 at 4:50 p.m. - 6:40 p.
- Pumped east sump into pot
- Opened make-up bypass at 1+2 p.h. 3:30 p.m. + 5+7 p.h. at 4:50 p.m. - high surge tank levels
- Washed up P104's + P105's + P109A

Trucks

T9 (time) _____

T363A _____ T363D _____ T311 _____ T312 _____ T331 _____

Acid _____ Others B.F. - 11

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PLANT OPERATOR TURN REPORT COMMENTS Rev. 1-20-06 13140102.frm

Date 3-26-06 Turn 7-3

Operator Piers Manager DD/

1.) Cooler change: put #4 on; rev #6 took #5 off (Rev lig side 11:30 #5)

2.) Final change: rev aust final plate

3.) Still pumping T-304C through preheater to T-363A stopped 50% 10:15 AM

4.) Put T-363A on recycle 6:30 AM

5.) Backflushing # 9+10, 3+4+5+7

6.) Shut gear pump down (302) at 8 AM ~~P-425~~

7.) Pumping water from T-311 at 9:20 AM P-425→312

3.) Put T-363-A on recycle + put 2 coils on 6:30 AM.

9.) Leak on P-309 water line going to L.O. decanter bad gasket, maint working on it. (DONE)

10.) Desulf is pumping tar for ½ hr. (done)

11.) Stopped pumping oil into system.

12.) Put (302) gear pump on at 12:15 PM

Trucks

T9 (time) ~~[illegible]~~ /

T363A Ø T363D Ø T311 Ø T312 Ø T331 Ø

Acid Ø Others 111 F.E.O. → B.F.

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PG II

PLANT OPERATOR TURN REPORT COMMENTS Rev. 1-20-06 13140102.frm

Date 3-26-06 Turn 7-3

Operator Pierce Manager DD

13.) Draining water on T-304A #4, 304B #6, T-304C #4

14.) Still have steam on primary bottoms A+C lines

15.) Did a thermal scan on gas line (B) from Pri. inlet → Booster suction main on porch.

16.) Primary side inlet is open 34" (valve stem) and Booster side is open 14" (valve stem)

17.) Took 1 coil off of T-304-C have 3 on rest leak.

18.) Washed up all Absorber pumps.

19.) Cleaned up inside control room.

20.) Pumping oil into #5 oil reservior.

Trucks

T9 (time)

T363A T363D T311 T312 T331

Acid Others

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DATE 3-26-06 TURN 7-3 OPERATOR B.K. + N.J.
MANAGER D.D. + K.V.

OIL AND TAR OPERATION LOG

1 Tar System is: DOWN COLD
2 Tanks with mixers are: T-363D
3 Tanks recycling are: T-9, T-363A + T-363D
4 Preheater temps are: T-9 IN 114 OUT 116 T-304C IN 106° OUT 140°
5 Loading trucks from: T-9, T-363D + T-311. P-425 → T-311B, T-31
6 Put T-363A ON RECYCLE at 6:30AM.
7 Drained gas mains.
8 When to line up + help with cooler change.
9 Pumped chloride drum empty.
10 Draining water off T-304A at fourth cock, T-304B at #6 cock,
11 T-304C at fourth cock.
12 Switch P-425 to T-312.
STOP → Pumping water off T-311 start at 9:15AM → 10:00AM.
14 Put 2 steam coils on T-363A at 9:45AM.
STOP → Pumping T-304C → T-363A take T-363A up to 50%.
16 Stopped pumping T-304c → T-363A steam on in four places @
17 P-304c → Pre-Heater
18 Closed valve on coil for T-304c that was leaking HAVE 3 coils on NOW
19 Stopped pumping water off T-311 due to water off TANK + hole in
20 Discharge line west of Distillation → GASKET IS FIX NOW.
21. P.O. STOP pumping OIL into system at 10:00AM from T-331.

PC		LIGHT OIL		FRONT END OIL		WASH OIL		T-9
363A	363D	311	312	CHEM	BF			
⊘	⊘	⊘	⊘	⊘	IIII	⊘	⊘	II

LEVELS			
T-9	38	311B	54
304A	73	312B	2
304B	75	331A	60
304C	56	363A	51
306C	36	363D	28

COILS			
304A	9	363A	2
304B	3	363D	1
304C (4)	3	306C	7
T-9	7		

Took 1 coil off T-304C - LEAKING.

Revised on 1/20/06
13140130.frm

Location: Doc Management

PLANT OPERATOR TURN REPORT COMMENTS Rev. 1-20-06 13140102.frm

Date 3/26/06 Turn 10-6

Operator S. CLARK Manager D.D.

12:40 2:10

Cooler change (Pri.) - #6 ON - Rev. #5 - #4 OFF / Rev. Liq. side #4

" " (Final) - Rev. West plate cooler - (2X)

Backflushed 5/7-3/4-9/10-strainer Valves.

Pumping T-304C → T-363-A - From Last Turn, thru preheater

Shut primary gear pump down, 11:50 / put back on - 4:10

Draining T-304-B - 6th drain, T-304-C - 7th drain

Steam on bottom of A/C primary cooler

Changed 5/7 Make-up flow from LIC → FIC, 1:35

Pumping D-4 → T-2 - 2:AM → 2:25 / Stopped

" 102-A → T-2 - 2:47 → 3:37 / Stopped

Pumped oil into system - 4:05 → 5:12

Trucks

T9 (time)

T363A 0 T363D 0 T311 0 T312 0 T331 0

Acid 0 Others B.F. 1111

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Date 4-10-06

Rev. 12/17/99LM 13140121.frm

OIL TAR
DAILY CHECK-OFF LIST

		Check Each Turn		
		1ST	2ND	3RD
1.	Check and review past 2 turns operating log sheets for changes in Process or equipment conditions.	✓	✓	✓
2.	Walk through - Visually check area and equipment for any spill, leaks or equipment failure at start of turn (inside and outside from Pitch Plant to Distillation area).	✓	✓	✓
3.	Check all safety equipment and devices for proper set up (include eye wash stations and safety showers) Report any abnormal conditions.	✓	✓	✓
4	Report any spills or leaks made or found through out turn. T-9 tank at start of turn 3-11	✓	✓	✓
5.	Check all pumps and turbines for proper lubrication, unusual noises, or vibration.	✓	✓	✓
6.	Check all gauges (Pressure temperature and levels) for cleanliness and proper operation of needles. Change gauges or adjust temperature as needed.	✓	✓	✓
7.	Empty all tar buckets at end of shift, and report any full buckets found at start of shift.	✓	✓	✓
8.	Take all required samples (follow guide line sample sheet). Samples taken on 11-7 are: T-9, T-303A-D, P-415B, T-304B,-C, T-306C P-452A	✓	NA	N/A
9.	Check and drain gas main drains 2-times a turn during cold weather and log it once during warmer whether or as needed.	✓	✓	✓
10.	Check Tank (T-304A, B, C and T-306 C) for water each turn. Drain if needed. 8th - 30 of B	✓	✓	✓
11.	Check all tanks on recycle for proper valve settings and operational mixers on for leaks and noises.	✓	✓	✓
12.	Work on assigned housekeeping area.	✓	✓	✓
13.	Make a personal report of general conditions for operator taking over shift (include any Maintenance or Contractor work going on etc., or any abnormal changes in operation)	✓	✓	✓
14	Check that all tar buckets have meter tar tags, fix ones that don't have tag.	✓	✓	✓

* Bring this sheet to line up.

COMMENTS Put out on pumps 425-A - 416-B 207-B on 3-11 tur
Change 425-A took 425-A off and put 425-B pump on
line 3-11 turn

	Oil/Tar Initials	Mgr. Initials
11-7	JK	
7-3	JS	
3-11	JS	

* by operator initial means that all listed items were done and management was informed of any problems / abnormalities.

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PLANT OPERATOR TURN REPORT COMMENTS

Rev. 6-8-97 JH 13140102.frm

Date 3-10-3 Turn C

Operator Marquel Manager Mcdowell

Tar dehydrator on feed 304C, 40gpm p452 to T-9

Primary change Rev 5 & 6

Final change Rev East & West

drawing 304B 8th

Pumped oil from T331 into system 5418A

** Pumping T306C to 304C

Put p425 A on took B off for Mtce min in

Trucks

T9 (time) 6 B 1 T-9 300 / PC 2635 0 / T-9 3 500 / T-9 4 615 / 1 Blast Front end

T363A 0 T363D 0 T311 0 T312 0 T331 0

Acid 0 Others 0

F:All_file/forms/newforms

LIGHT OIL / TAR OPERATOR TURN REPORT

Rev. 1/15/01 db 13140103.frm

Date 4-11-03 Turn 1-7

Operator JASON Manager DABBS

Unit	On	Ready	Down
P9A	✓		
P9B		✓	
P363A	✓		
P363B		✓	
P363C	✓		
P363D		✓	
SP9A		✓	
SP9B		✓	
P204A		✓	
P204B		✓	
P204C	✓		
P207B	✓		
P207C		✓	
P304A	✓		
P304B			✓
SP304A		✓	
SP304B		✓	
CENT SUMP E		✓	
P302A		✓	
P302B		✓	
P309A		✓	
LO DOCK SUMP A		✓	

Unit	On	Ready	Down
P400C	✓		
P400D		✓	
P452A	✓		
P452B		✓	
CHLORIDE N		✓	
CHLORIDE S		✓	
P405A		✓	
P405B		✓	
P414A		✓	
P414B	✓		
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A	✓		
P418B		✓	
P425A			✓
P425B	✓		
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			✓
SM. DIST SUMP S			✓

ON means in service
Ready means can be put in service
Down means cannot be put in service

Comments: _____

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LIGHT OIL / TAR OPERATOR TURN REPORT

Rev. 1/15/01 db 13140103.frm

Date 4-11-03 Turn 7-3

Operator Piers Manager Carter

Unit	On	Ready	Down
P9A		✓	
P9B	✓		
P363A	✓		
P363B		✓	
P363C	✓		
P363D		✓	
SP9A	✓		
SP9B		✓	
P204A		✓	
P204B		✓	
P204C	✓		
P207B	✓		
P207C		✓	
P304A			✓
P304B	✓		
SP304A		✓	
SP304B	✓		
CENT SUMP E		✓	
P302A		✓	
P302B		✓	
P309A		✓	
LD DOCK SUMP A		✓	

Unit	On	Ready	Down
P400C	✓		
P400D		✓	
P452A	✓		
P452B		✓	
CHLORIDE N			✓
CHLORIDE S		✓	
P405A		✓	
P405B		✓	
P414A		✓	
P414B	✓		
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A		✓	
P418B		✓	
P425A		✓	
P425B	✓		
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			✓
SM. DIST SUMP S			✓

ON means in service
Ready means can be put in service
Down means cannot be put in service

Comments: _____

F:All_file/forms/newforms

Date 4-9-03

Rev. 12/17/99LM 13140121.frm

OIL TAR
DAILY CHECK-OFF LIST

		Check Each Turn		
		1ST	2ND	3RD
1.	Check and review past 2 turns operating log sheets for changes in Process or equipment conditions.	✓	✓	✓
2.	Walk through - Visually check area and equipment for any spill, leaks or equipment failure at start of turn (inside and outside from Pitch Plant to Distillation area).	✓	✓	✓
3.	Check all safety equipment and devices for proper set up (include eye wash stations and safety showers) Report any abnormal conditions.	✓	✓	✓
4	Report any spills or leaks made or found through out turn.	✓	✓	✓
5.	Check all pumps and turbines for proper lubrication, unusual noises, or vibration.	✓	✓	✓
6.	Check all gauges (Pressure temperature and levels) for cleanliness and proper operation of needles. Change gauges or adjust temperature as needed.	✓	✓	✓
7.	Empty all tar buckets at end of shift, and report any full buckets found at start of shift.	✓	✓	✓
8.	Take all required samples (follow guide line sample sheet). Samples taken on 11-7 are: T-9, T-363A-D, P-302A-B, P458 T-304C, T-304A, P452A	✓	NA	N/A
9.	Check and drain gas main drains 2-times a turn during cold weather and log it once during warmer whether or as needed.	✓	✓	✓
10.	Check Tank (T-304A, B, C and T-306 C) for water each turn. Drain if needed.	✓	✓	✓
11.	Check all tanks on recycle for proper valve settings and operational mixers on for leaks and noises.	✓	✓	✓
12.	Work on assigned housekeeping area.	✓	✓	✓
13.	Make a personal report of general conditions for operator taking over shift (include any Maintenance or Contractor work going on etc., or any abnormal changes in operation)	✓	✓	✓
14	Check that all tar buckets have metar tar tags, fix ones that don't have tag.	✓	✓	✓

* Bring this sheet to line up.

COMMENTS

	Oil/Tar Initials	Mgr./TL Initials
11-7	JK	[illegible]
7-3	JS	[illegible]
3-11	GP	[illegible]

* by operator initial means that all listed items were done and management was informed of any problems / abnormalities.

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Date 4-8-03

Rev. 12/17/99LM 13140121.frm

OIL TAR
DAILY CHECK-OFF LIST

		Check Each Turn		
		1ST	2ND	3RD
1.	Check and review past 2 turns operating log sheets for changes in Process or equipment conditions.	✓	✓	✓
2.	Walk through - Visually check area and equipment for any spill, leaks or equipment failure at start of turn (inside and outside from Pitch Plant to Distillation area).	✓	✓	✓
3.	Check all safety equipment and devices for proper set up (include eye wash stations and safety showers) Report any abnormal conditions.	✓	✓	✓
4	Report any spills or leaks made or found through out turn.	✓	✓	✓
5.	Check all pumps and turbines for proper lubrication, unusual noises, or vibration.	✓	✓	✓
6.	Check all gauges (Pressure temperature and levels) for cleanliness and proper operation of needles. Change gauges or adjust temperature as needed.	✓	✓	✓
7.	Empty all tar buckets at end of shift, and report any full buckets found at start of shift.	✓	✓	✓
8.	Take all required samples (follow guide line sample sheet). Samples taken on 11-7 are: T-9, T-363A-D, P-415B, T-304A, B, C T-306C, P-452A	✓	✓	N/A
9.	Check and drain gas main drains 2-times a turn during cold weather, and log it once during warmer whether or as needed.	✓	✓	✓
10.	Check Tank (T-304A, B, C and T-306 C) for water each turn. Drain if needed.	✓	✓	✓
11.	Check all tanks on recycle for proper valve settings and operational mixers on for leaks and noises.	✓	✓	✓
12.	Work on assigned housekeeping area.	✓	✓	✓
13.	Make a personal report of general conditions for operator taking over shift (include any Maintenance or Contractor work going on etc., or any abnormal changes in operation)	✓	✓	✓
14	Check that all tar buckets have metar tar tags, fix ones that don't have tag.	✓	✓	✓

* Bring this sheet to line up.

COMMENTS Took samples on 331-2 resamples T-304A

	Oil/Tar Initials	Mgr./TL Initials
11-7	JK	[illegible]
7-3	DS	[illegible]
3-11	GP	[illegible]

* by operator initial means that all listed items were done and management was informed of any problems / abnormalities.

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Date 4-7-03

Rev. 12/17/99LM 13140121.frm

OIL TAR
DAILY CHECK-OFF LIST

		Check Each Turn		
		1ST	2ND	3RD
1.	Check and review past 2 turns operating log sheets for changes in Process or equipment conditions.	✓	✓	✓
2.	Walk through - Visually check area and equipment for any spill, leaks or equipment failure at start of turn (inside and outside from Pitch Plant to Distillation area).	✓	✓	✓
3.	Check all safety equipment and devices for proper set up (include eye wash stations and safety showers) Report any abnormal conditions.	✓	✓	✓
4	Report any spills or leaks made or found through out turn.	✓	✓	✓
5.	Check all pumps and turbines for proper lubrication, unusual noises, or vibration.	✓	✓	✓
6.	Check all gauges (Pressure temperature and levels) for cleanliness and proper operation of needles. Change gauges or adjust temperature as needed.	✓	✓	✓
7.	Empty all tar buckets at end of shift, and report any full buckets found at start of shift.	✓	✓	✓
8.	Take all required samples (follow guide line sample sheet). Samples taken on 11-7 are: T-4 363-A 363-D 304-C P-415 302-B 302-D P-452 304-A	✓	N/A	N/A
9.	Check and drain gas main drains 2-times a turn during cold weather, and log it once during warmer whether or as needed.	✓	✓	✓
10.	Check Tank (T-304A, B, C and T-306 C) for water each turn. Drain if needed. 304-B	✓	✓	✓
11.	Check all tanks on recycle for proper valve settings and operational mixers on for leaks and noises.	✓	✓	✓
12.	Work on assigned housekeeping area.	✓	✓	✓
13.	Make a personal report of general conditions for operator taking over shift (include any Maintenance or Contractor work going on etc., or any abnormal changes in operation)	✓	✓	✓
14	Check that all tar buckets have metar tar tags, fix ones that don't have tag.	✓	✓	✓

* Bring this sheet to line up.

COMMENTS Put oil in pumps 425-A - 405-A 416-B 11-7 tower

	Oil/Tar Initials	Mgr./TL Initials
11-7	G.S.	[illegible]
7-3	B.S.	[illegible]
3-11	G.P.	[illegible]

* by operator initial means that all listed items were done and management was informed of any problems / abnormalities.

F: oil_file/form/Newforms.xls

Date 4-6-03

Rev. 12/17/99LM 1314D121.frm

OIL TAR
DAILY CHECK-OFF LIST

		Check Each Turn		
		1ST	2ND	3RD
1.	Check and review past 2 turns operating log sheets for changes in Process or equipment conditions.	✓	✓	✓
2.	Walk through - Visually check area and equipment for any spill, leaks or equipment failure at start of turn (inside and outside from Pitch Plant to Distillation area).	✓	✓	✓
3.	Check all safety equipment and devices for proper set up (include eye wash stations and safety showers) Report any abnormal conditions.	✓	✓	✓
4	Report any spills or leaks made or found through out turn.	✓	✓	✓
5.	Check all pumps and turbines for proper lubrication, unusual noises, or vibration.	✓	✓	✓
6.	Check all gauges (Pressure temperature and levels) for cleanliness and proper operation of needles. Change gauges or adjust temperature as needed.	✓	✓	✓
7.	Empty all tar buckets at end of shift, and report any full buckets found at start of shift.	✓	✓	✓
8.	Take all required samples (follow guide line sample sheet). Samples taken on 11-7 are: T-9 363-A 363-D 304-C P-452 P-415	✓	NA	NA
9.	Check and drain gas main drains 2-times a turn during cold weather, and log it once during warmer whether or as needed.	✓	✓	✓
10.	Check Tank (T-304A, B, C and T-306 C) for water each turn. Drain if needed. 5th 304-B	✓	✓	✓
11.	Check all tanks on recycle for proper valve settings and operational mixers on for leaks and noises.	✓	✓	✓
12.	Work on assigned housekeeping area.	✓	✓	✓
13.	Make a personal report of general conditions for operator taking over shift (include any Maintenance or Contractor work going on etc., or any abnormal changes in operation)	✓	✓	✓
14	Check that all tar buckets have metar tar tags, fix ones that don't have tag.	✓	✓	✓

* Bring this sheet to line up.

COMMENTS _____

	Oil/Tar Initials	Mgr./TL Initials
11-7	G.S.	[illegible]
7-3	G.S.	[illegible]
3-11	JS/GS	[illegible]

* by operator initial means that all listed items were done and management was informed of any problems / abnormalities.

F: all_file/form/Newforms.xls

Date 4-5-03

Rev. 12/17/99LM 13140121.frm

OIL TAR
DAILY CHECK-OFF LIST

		Check Each Turn		
		1ST	2ND	3RD
1.	Check and review past 2 turns operating log sheets for changes in Process or equipment conditions.	✓	✓	✓
2.	Walk through - Visually check area and equipment for any spill, leaks or equipment failure at start of turn (inside and outside from Pitch Plant to Distillation area).	✓	✓	✓
3.	Check all safety equipment and devices for proper set up (include eye wash stations and safety showers) Report any abnormal conditions.	✓	✓	✓
4	Report any spills or leaks made or found through out turn.	✓	✓	✓
5.	Check all pumps and turbines for proper lubrication, unusual noises, or vibration.	✓	✓	✓
6.	Check all gauges (Pressure temperature and levels) for cleanliness and proper operation of needles. Change gauges or adjust temperature as needed.	✓	✓	✓
7.	Empty all tar buckets at end of shift, and report any full buckets found at start of shift.	✓	✓	✓
8.	Take all required samples (follow guide line sample sheet). Samples taken on 11-7 are: T-9 363-A 363-D 304-C 304-B 306-C P-452 P-415	✓	NA	NA
9.	Check and drain gas main drains 2-times a turn during cold weather and log it once during warmer whether or as needed.	✓	✓	✓
10.	Check Tank (T-304A, B, C and T-306 C) for water each turn. Drain if needed. 8+4 304-B	✓	✓	✓
11.	Check all tanks on recycle for proper valve settings and operational mixers on for leaks and noises.	✓	✓	✓
12.	Work on assigned housekeeping area.	✓	✓	✓
13.	Make a personal report of general conditions for operator taking over shift (include any Maintenance or Contractor work going on etc., or any abnormal changes in operation)	✓	✓	✓
14	Check that all tar buckets have metar tar tags, fix ones that don't have tag.	✓	✓	✓

* Bring this sheet to line up.

COMMENTS

	Oil/Tar Initials	Mgr./TL Initials
11-7	ES *	[illegible]
7-3	JK *	TiC.
3-11	JK *	[illegible]

* by operator initial means that all listed items were done and management was informed of any problems / abnormalities.

F: all_file/form/Newforms.xls

4-4-03

Rev. 12/17/99LM 13140121.frm

OIL TAR
DAILY CHECK-OFF LIST

		Check Each Turn		
		1ST	2ND	3RD
1.	Check and review past 2 turns operating log sheets for changes in Process or equipment conditions.	✓	✓	✓
2.	Walk through - Visually check area and equipment for any spill, leaks or equipment failure at start of turn (inside and outside from Pitch Plant to Distillation area).	✓	✓	✓
3.	Check all safety equipment and devices for proper set up (include eye wash stations and safety showers) Report any abnormal conditions.	✓	✓	✓
4	Report any spills or leaks made or found through out turn.	✓	✓	✓
5.	Check all pumps and turbines for proper lubrication, unusual noises, or vibration.	✓	✓	✓
6.	Check all gauges (Pressure temperature and levels) for cleanliness and proper operation of needles. Change gauges or adjust temperature as needed.	✓	✓	✓
7.	Empty all tar buckets at end of shift, and report any full buckets found at start of shift.	✓	✓	✓
8.	Take all required samples (follow guide line sample sheet). Samples taken on 11-7 are: T-9 363-A 363-D 304-A 306-C 304-C P-415	✓	✓ T-331	N/A
9.	Check and drain gas main drains 2-times a turn during cold weather and log it once during warmer whether or as needed.	✓	✓	✓
10.	Check Tank (T-304A, B, C and T-306 C) for water each turn. Drain if needed. 304-A 304-B	✓	✓	✓
11.	Check all tanks on recycle for proper valve settings and operational mixers on for leaks and noises.	✓	✓	✓
12.	Work on assigned housekeeping area.	✓	✓	✓
13.	Make a personal report of general conditions for operator taking over shift (include any Maintenance or Contractor work going on etc., or any abnormal changes in operation)	✓	✓	✓
14	Check that all tar buckets have metar tar tags, fix ones that don't have tag.	✓	✓	✓

* Bring this sheet to line up.

COMMENTS _____

	Oil/Tar Initials	Mgr./TL Initials
11-7	GS	[illegible]
7-3	JK	[illegible]
3-11	[illegible]	[illegible]

* by operator initial means that all listed items were done and management was informed of any problems / abnormalities.

F: atl_file/form/Newforms.xls

Date 4-3-03

Rev. 12/17/99LM 13140121.frm

OIL TAR
DAILY CHECK-OFF LIST

		Check Each Turn		
		1ST	2ND	3RD
1.	Check and review past 2 turns operating log sheets for changes in Process or equipment conditions.	✓	✓	✓
2.	Walk through - Visually check area and equipment for any spill, leaks or equipment failure at start of turn (inside and outside from Pitch Plant to Distillation area).	✓	✓	✓
3.	Check all safety equipment and devices for proper set up (include eye wash stations and safety showers) Report any abnormal conditions.	✓	✓	✓
4	Report any spills or leaks made or found through out turn.	✓	✓	✓
5.	Check all pumps and turbines for proper lubrication, unusual noises, or vibration.	✓	✓	✓
6.	Check all gauges (Pressure temperature and levels) for cleanliness and proper operation of needles. Change gauges or adjust temperature as needed.	✓	✓	✓
7.	Empty all tar buckets at end of shift, and report any full buckets found at start of shift.	✓	✓	✓
8.	Take all required samples (follow guide line sample sheet). Samples taken on 11-7 are: T-9 363-A 363-D 304-C 304-A 306-C P-452 P-415	✓	N/A	N/A
9.	Check and drain gas main drains 2-times a turn during cold weather, and log it once during warmer whether or as needed.	✓	✓	✓
10.	Check Tank (T-304A, B, C and T-306 C) for water each turn. Drain if needed. 8-4- 304-B	✓	✓	✓
11.	Check all tanks on recycle for proper valve settings and operational mixers on for leaks and noises.	✓	✓	✓
12.	Work on assigned housekeeping area.	✓	✓	✓
13.	Make a personal report of general conditions for operator taking over shift (include any Maintenance or Contractor work going on etc., or any abnormal changes in operation)	✓	✓	✓
14	Check that all tar buckets have metar tar tags, fix ones that don't have tag.	✓	✓	✓

* Bring this sheet to line up.

COMMENTS _____

	Oil/Tar Initials	Mgr./TL Initials
11-7	R.S.	[illegible]
7-3	JK	[illegible]
3-11	BS	[illegible]

* by operator initial means that all listed items were done and management was informed of any problems / abnormalities.

F: all_file/form/Newforms.xls

Date 4-2-03

Rev. 12/17/99LM 13140121.frm

OIL TAR
DAILY CHECK-OFF LIST

		Check Each Turn		
		1ST	2ND.	3RD
1.	Check and review past 2 turns operating log sheets for changes in Process or equipment conditions.	✓	✓	✓
2.	Walk through - Visually check area and equipment for any spill, leaks or equipment failure at start of turn (inside and outside from Pitch Plant to Distillation area).	✓	✓	✓
3.	Check all safety equipment and devices for proper set up (include eye wash stations and safety showers) Report any abnormal conditions.	✓	✓	✓
4	Report any spills or leaks made or found through out turn.	✓	✓	✓
5.	Check all pumps and turbines for proper lubrication, unusual noises, or vibration.	✓	✓	✓
6.	Check all gauges (Pressure temperature and levels) for cleanliness and proper operation of needles. Change gauges or adjust temperature as needed.	✓	✓	✓
7.	Empty all tar buckets at end of shift, and report any full buckets found at start of shift.	✓	✓	✓
8.	Take all required samples (follow guide line sample sheet). Samples taken on 11-7 are: T-303A, D 304A, B C 306C P302. P415 P452	✓	N/A	N/A
9.	Check and drain gas main drains 2-times a turn during cold weather and log it once during warmer whether or as needed.	✓	✓	✓
10.	Check Tank (T-304A, B, C and T-306 C) for water each turn. Drain if needed.	✓	✓	✓
11.	Check all tanks on recycle for proper valve settings and operational mixers on for leaks and noises.	✓	✓	✓
12.	Work on assigned housekeeping area.	✓	✓	✓
13.	Make a personal report of general conditions for operator taking over shift (include any Maintenance or Contractor work going on etc., or any abnormal changes in operation)	✓	✓	✓
14	Check that all tar buckets have metar tar tags, fix ones that don't have tag.	✓	✓	✓

* Bring this sheet to line up.

COMMENTS

	Oil/Tar Initials	Mgr./TL Initials
11-7	JS *	[illegible]
7-3	JK *	[illegible]
3-11	JS	[illegible]

* by operator initial means that all listed items were done and management was informed of any problems / abnormalities.

F: all_file/form/Newforms.xls

Date 4-1-03

Rev. 12/17/99LM 13140121.frm

OIL TAR
DAILY CHECK-OFF LIST

		Check Each Turn		
		1ST	2ND	3RD
1.	Check and review past 2 turns operating log sheets for changes in Process or equipment conditions.	✓	✓	✓
2.	Walk through - Visually check area and equipment for any spill, leaks or equipment failure at start of turn (inside and outside from Pitch Plant to Distillation area).	✓	✓	✓
3.	Check all safety equipment and devices for proper set up (include eye wash stations and safety showers) Report any abnormal conditions.	✓	✓	✓
4.	Report any spills or leaks made or found through out turn.	✓	✓	✓
5.	Check all pumps and turbines for proper lubrication, unusual noises, or vibration.	✓	✓	✓
6.	Check all gauges (Pressure temperature and levels) for cleanliness and proper operation of needles. Change gauges or adjust temperature as needed.	✓	✓	✓
7.	Empty all tar buckets at end of shift, and report any full buckets found at start of shift.	✓	✓	✓
8.	Take all required samples (follow guide line sample sheet). Samples taken on 11-7 are: T9 363A, D 304BCA 306C P415 P5752	✓	N/A	✓
9.	Check and drain gas main drains 2-times a turn during cold weather and log it once during warmer whether or as needed.	✓	✓	✓
10.	Check Tank (T-304A, B, C and T-306 C) for water each turn. Drain if needed.	✓	✓	✓
11.	Check all tanks on recycle for proper valve settings and operational mixers on for leaks and noises.	✓	✓	✓
12.	Work on assigned housekeeping area.	✓	✓	✓
13.	Make a personal report of general conditions for operator taking over shift (include any Maintenance or Contractor work going on etc., or any abnormal changes in operation)	✓	✓	✓
14	Check that all tar buckets have metar tar tags, fix ones that don't have tag.	✓	✓	✓

* Bring this sheet to line up.

COMMENTS

	Oil/Tar Initials	Mgr./TL Initials
11-7	JS	[illegible]
7-3	JK	[illegible]
3-11	JS	TC

* by operator initial means that all listed items were done and management was informed of any problems / abnormalities.

F: all_file/form/Newforms.xls

Date 3-31-03 Rev. 12/17/99LM 13140121.frm

OIL TAR
DAILY CHECK-OFF LIST

		Check Each Turn		
		1ST	2ND	3RD
1.	Check and review past 2 turns operating log sheets for changes in Process or equipment conditions.	✓	✓	✓
2.	Walk through - Visually check area and equipment for any spill, leaks or equipment failure at start of turn (inside and outside from Pitch Plant to Distillation area).	✓	✓	✓
3.	Check all safety equipment and devices for proper set up (include eye wash stations and safety showers) Report any abnormal conditions.	✓	✓	✓
4	Report any spills or leaks made or found through out turn.	✓	✓	✓
5.	Check all pumps and turbines for proper lubrication, unusual noises, or vibration.	✓	✓	✓
6.	Check all gauges (Pressure temperature and levels) for cleanliness and proper operation of needles. Change gauges or adjust temperature as needed.	✓	✓	✓
7.	Empty all tar buckets at end of shift, and report any full buckets found at start of shift.	✓	✓	✓
8.	Take all required samples (follow guide line sample sheet). Samples taken on 11-7 are: T9, 363(9A), 304C, 306C, P415, P452, P302 (2X)	✓	N/A	N/A
9.	Check and drain gas main drains 2-times a turn during cold weather and log it once during warmer whether or as needed.	✓	✓	✓
10.	Check Tank (T-304A, B, C and T-306 C) for water each turn. Drain if needed. 8th 304-B	✓	✓	✓
11.	Check all tanks on recycle for proper valve settings and operational mixers on for leaks and noises.	✓	✓	✓
12.	Work on assigned housekeeping area.	✓	✓	✓
13.	Make a personal report of general conditions for operator taking over shift (include any Maintenance or Contractor work going on etc., or any abnormal changes in operation)	✓	✓	✓
14	Check that all tar buckets have metar tar tags, fix ones that don't have tag.	✓	✓	✓

* Bring this sheet to line up.

COMMENTS _____

	Oil/Tar Initials	Mgr./TL Initials
11-7	GP	[illegible]
7-3	JS	[illegible]
3-11	JS	TC

* by operator initial means that all listed items were done and management was informed of any problems / abnormalities.

F: all file/form/Newforms.xls

Date 3-30-03

Rev. 12/17/99LM 13140121.frm

OIL TAR
DAILY CHECK-OFF LIST

		Check Each Turn		
		1ST	2ND	3RD
1.	Check and review past 2 turns operating log sheets for changes in Process or equipment conditions.	✓	✓	✓
2.	Walk through - Visually check area and equipment for any spill, leaks or equipment failure at start of turn (inside and outside from Pitch Plant to Distillation area).	✓	✓	✓
3.	Check all safety equipment and devices for proper set up (include eye wash stations and safety showers) Report any abnormal conditions.	✓	✓	✓
4	Report any spills or leaks made or found through out turn.	✓	✓	✓
5.	Check all pumps and turbines for proper lubrication, unusual noises, or vibration.	✓	✓	✓
6.	Check all gauges (Pressure temperature and levels) for cleanliness and proper operation of needles. Change gauges or adjust temperature as needed.	✓	✓	✓
7.	Empty all tar buckets at end of shift, and report any full buckets found at start of shift.	✓	✓	✓
8.	Take all required samples (follow guide line sample sheet). Samples taken on 11-7 are: T9, 363A+D, 304C, 306C, P452 P415	✓	N/A	N/A
9.	Check and drain gas main drains 2-times a turn during cold weather and log it once during warmer whether or as needed.	✓	✓	✓
10.	Check Tank (T-304A, B, C and T-306 C) for water each turn. Drain if needed. 8th 304-B	✓	✓	✓
11.	Check all tanks on recycle for proper valve settings and operational mixers on for leaks and noises.	✓	✓	✓
12.	Work on assigned housekeeping area.	✓	✓	✓
13.	Make a personal report of general conditions for operator taking over shift (include any Maintenance or Contractor work going on etc., or any abnormal changes in operation)	✓	✓	✓
14	Check that all tar buckets have metar tar tags, fix ones that don't have tag.	✓	✓	✓

* Bring this sheet to line up.

COMMENTS Oiled up 425-A 207-B 452-B on 7-3 Turn
3-11 Put oil into P-425A, oil is leaking.

	Oil/Tar Initials	Mgr./TL Initials
11-7	G.P. *	[illegible]
7-3	[illegible] *	[illegible]
3-11	BM *	T.C.

* by operator initial means that all listed items were done and management was informed of any problems / abnormalities.

F: all file/form/Newforms.xls

Date 3-29-03

Rev. 12/17/99LM 13140121.frm

OIL TAR
DAILY CHECK-OFF LIST

		Check Each Turn		
		1ST	2ND	3RD
1.	Check and review past 2 turns operating log sheets for changes in Process or equipment conditions.	✓	✓	✓
2.	Walk through - Visually check area and equipment for any spill, leaks or equipment failure at start of turn (inside and outside from Pitch Plant to Distillation area).	✓	✓	✓
3.	Check all safety equipment and devices for proper set up (include eye wash stations and safety showers) Report any abnormal conditions.	✓	✓	✓
4	Report any spills or leaks made or found through out turn.	✓	✓	✓
5.	Check all pumps and turbines for proper lubrication, unusual noises, or vibration.	✓	✓	✓
6.	Check all gauges (Pressure temperature and levels) for cleanliness and proper operation of needles. Change gauges or adjust temperature as needed.	✓	✓	✓
7.	Empty all tar buckets at end of shift, and report any full buckets found at start of shift.	✓	✓	✓
8.	Take all required samples (follow guide line sample sheet). Samples taken on 11-7 are: 29, 363A+D, 304 B+C, 306C, P455 P-415	✓	N/A	N/A
9.	Check and drain gas main drains 2-times a turn during cold weather and log it once during warmer whether or as needed.	✓	✓	✓
10.	Check Tank (T-304A, B, C and T-306 C) for water each turn. Drain if needed. ~~8~~ 4B	✓	✓	✓
11.	Check all tanks on recycle for proper valve settings and operational mixers on for leaks and noises.	✓	✓	✓
12.	Work on assigned housekeeping area.	✓	✓	✓
13.	Make a personal report of general conditions for operator taking over shift (include any Maintenance or Contractor work going on etc., or any abnormal changes in operation)	✓	✓	✓
14	Check that all tar buckets have metar tar tags, fix ones that don't have tag.	✓	✓	✓

* Bring this sheet to line up.

COMMENTS Put in oil pumps #25-A 405-A - 416-B on 7-3 Turn
Change the Drain to the 9th cock on 7-3 Turn

	Oil/Tar Initials	Mgr./TL Initials
11-7	GP	[illegible]
7-3	[illegible]	[illegible]
3-11	JK	TC

* by operator initial means that all listed items were done and management was informed of any problems / abnormalities.

F: atl_file/form/Newforms.xls

Date 3-28

Rev. 12/17/99LM 13140121.frm

OIL TAR
DAILY CHECK-OFF LIST

		Check Each Turn		
		1ST	2ND	3RD
1.	Check and review past 2 turns operating log sheets for changes in Process or equipment conditions.	✓	✓	✓
2.	Walk through - Visually check area and equipment for any spill, leaks or equipment failure at start of turn (inside and outside from Pitch Plant to Distillation area).	✓	✓	✓
3.	Check all safety equipment and devices for proper set up (include eye wash stations and safety showers) Report any abnormal conditions.	✓	✓	✓
4	Report any spills or leaks made or found through out turn.	✓	✓	✓
5.	Check all pumps and turbines for proper lubrication, unusual noises, or vibration.	✓	✓	✓
6.	Check all gauges (Pressure temperature and levels) for cleanliness and proper operation of needles. Change gauges or adjust temperature as needed.	✓	✓	✓
7.	Empty all tar buckets at end of shift, and report any full buckets found at start of shift.	✓	✓	✓
8.	Take all required samples (follow guide line sample sheet). Samples taken on 11-7 are: T9 363A,D 304B,C 306C P452 415 302-2	✓	N/A	MA
9.	Check and drain gas main drains 2-times a turn during cold weather, and log it once during warmer whether or as needed.	✓	✓	✓
10.	Check Tank (T-304A, B, C and T-306 C) for water each turn. Drain if needed. 8th 304-B	✓	✓	✓
11.	Check all tanks on recycle for proper valve settings and operational mixers on for leaks and noises.	✓	✓	✓
12.	Work on assigned housekeeping area.	✓	✓	✓
13.	Make a personal report of general conditions for operator taking over shift (include any Maintenance or Contractor work going on etc., or any abnormal changes in operation)	✓	✓	✓
14	Check that all tar buckets have metar tar tags, fix ones that don't have tag.	✓	✓	✓

* Bring this sheet to line up.

COMMENTS Took samples on 302-B - Washed oil on 7-3 tu
Put oil in pumps 425-A 452-B 400-C 400-D
and chloride pump on 7-3 turn

	Oil/Tar Initials	Mgr./TL Initials
11-7	JS	MA
7-3	J.S.	
3-11	JK	T.C.

* by operator initial means that all listed items were done and management was informed of any problems / abnormalities.

F: all_file/form/Newforms.xls

Date 3-27

Rev. 12/17/99LM 13140121.frm

OIL TAR
DAILY CHECK-OFF LIST

		Check Each Turn		
		1ST	2ND	3RD
1.	Check and review past 2 turns operating log sheets for changes in Process or equipment conditions.	✓	✓	✓
2.	Walk through - Visually check area and equipment for any spill, leaks or equipment failure at start of turn (inside and outside from Pitch Plant to Distillation area).	✓	✓	✓
3.	Check all safety equipment and devices for proper set up (include eye wash stations and safety showers) Report any abnormal conditions.	✓	✓	✓
4	Report any spills or leaks made or found through out turn.	✓	✓	✓
5.	Check all pumps and turbines for proper lubrication, unusual noises, or vibration.	✓	✓	✓
6.	Check all gauges (Pressure temperature and levels) for cleanliness and proper operation of needles. Change gauges or adjust temperature as needed.	✓	✓	✓
7.	Empty all tar buckets at end of shift, and report any full buckets found at start of shift.	✓	✓	✓
8.	Take all required samples (follow guide line sample sheet). Samples taken on 11-7 are: T1 363 A,D 304C P415 P452	✓	N/A	N/A
9.	Check and drain gas main drains 2-times a turn during cold weather and log it once during warmer whether or as needed.	✓	✓	✓
10.	Check Tank (T-304A, B, C and T-306 C) for water each turn. Drain if needed. 8th 304B	✓	✓	✓
11.	Check all tanks on recycle for proper valve settings and operational mixers on for leaks and noises.	✓	✓	✓
12.	Work on assigned housekeeping area.	✓	✓	✓
13.	Make a personal report of general conditions for operator taking over shift (include any Maintenance or Contractor work going on etc., or any abnormal changes in operation)	✓	✓	✓
14	Check that all tar buckets have metar tar tags, fix ones that don't have tag.	✓	✓	✓

* Bring this sheet to line up

COMMENTS Put all new pumps 425-A 405-A 452-B and pump house on 7-3 turn

	Oil/Tar Initials	Mgr./TL Initials
11-7	[illegible]	[illegible]
7-3	[illegible]	[illegible]
3-11	OK	[illegible]

* by operator initial means that all listed items were done and management was informed of any problems / abnormalities.

F: all_file/form/Newforms.xls

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 6-8-97 JH

13140102.frm

Date 3-27-2003 Turn 11-7

Operator Steve Benge Manager Harry Mendoza

Primary cooler change was #5 reversed. #5 and #6 are on line.
Reversed the East and West Final Plate coolers.
The dehydrator is running at 45 G.P.M. from 304-C to T-9
304-B is draining 8TH cook from the bottom.
No service water is on at the Finals.
* Pumping 301 to 306-C.
311-B is set for loading. Pump 425 is going to 312-B.
Pumper truck took 2 loads out of 105 containment Pad.

Trucks

T9 (time) 0

T363A 3 T363D 0 T311 2 T312 0 T331 0

Acid 0 Others 0

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 6-8-97 JH 13140102.fm

Date 3-27-3 Turn B

Operator C Marquel Manager Mcdowell

Pumping T301 to 304C stop!

~~tan~~ dehydrator on feed 304C, 45 gpm p452 to T-9

Primary change Rev 6, 5 also on

Final change Rev E & West

draining 304B 8th

took 304B p off leaking at seal

Pumped oil from T331 into system as per S.C.

~~keep~~ level in Deuncker at 50 to 60%

took off p304B, leaking min in. lock out ready for M

tan dehydrator now going to 304A, feed 40 gmp.

Put 301 back on recycle; and 306C

Mode D Lock 6 is on #4 loadsharing Controller

405B p is ready;

Trucks

T9 (time) 0

T363A 0 T363D 0 T311 0 4 T312 0 T331 0

Acid 2 Others 1923 in Area; 1 sulfate

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 6-8-97 JH 13140102.frm

Date 3-27-03 Turn 3-11

Operator D. Mack Manager D. Dabbs

Tar Dehydrator on, feed 304C 20 GPM R452 → 304A.
C.C. Reversed #5, Primary Plate Cooler.
Reversed east + west final Plate Coolers.
pumped 304B → 363A.
Ran #4 Exch. up to bring turbine temp down. no avail.
No service water → B+C finals.
Draining 304B at 8th cock.
Koppers down.

Trucks

T9 (time) 0

T363A 5 T363D 1 T311 2 T312 0 T331 0

Acid 0 Others 0

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 6-8-97 JH 13140102.fm

Date 3-28-2003 Turn 11-7

Operator Steve Benoze Manager Harry Mendoza

Primary Cooler change was #5 removed. #5 & #6 are on.

Removed the East and West Final Plate coolers.

The dehydrator is running at 8 P.M. from 304-A to 304-A.

311-B is set for loading. Pump 425 is going to 302-B.

304-B is draining 8th cock from the bottom.

No service water is on at the Finals.

Koppers is still down.

Pumped 304-B into 363-A.

Pumped down the Chloride drum.

Trying to equalize 302's.

Trucks

T9 (time) 0

T363A 2 T363D 1 T311 2 T312 0 T331 0

Acid 0 Others 0

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 6-8-97 JH 13140102.fm

Date 3-28-3 Turn B

Operator Marquel Manager McDowell

tar dehydrator on feed 304C; V-487 p452 to 304A
Pump change Rev 6, 5 also on
Fuel change Rev East + West F.C.
draining 304B 8th
Gas rescue drill at ETF
one steam lance at 60" gas Main
Rodded B + C Venturi
Man install a New Hot Water Heater! Bathroom
System check 427 all floors! steam out 427, 452
drain 50 gal oil from #5 and refill

Trucks

T9 (time) 0 (2-363A 1,363D Railroad Car)

T363A 02 T363D 0 T311 03 T312 0 T331 02

Acid 0 Others 2 sulfate;

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 6-8-97 JH 13140102.frm

Date 3-26-03 Turn 3-11

Operator D. Mack Manager D. Dabbs

Tar Dehydrator on, feed 304C V.P. 35% R452 → 304A.
C.C. Reversed #5, Primary Plate Cooler.
Reversed east + west final Plate Coolers.
pumped B- Benzol scrubber level down.
pumped water off 312, R425 → 311.
pumped some oil into Thu system.
Had 1923 pumper truck in our area.
Primary opr. steamed 302 equalizing line, + gear pump.
ETF having computer Problem's Neshaps number are off.
Koppers are down.
Draining 304 B at 8th cock.
No water on B+C final Coolers.

Trucks

T9 (time) 0

T363A 1 T363D 0 T311 1 T312 1 T331 0

Acid 0 Others 0

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 6-8-97 JH 13140102.fmh

Date 3-29-3 Turn A

Operator [illegible] Manager Carter

Tar dehydrator on feed 304C, man V-40 Showing 55 gpm p452 to T304A

Primary charge Rev 6, 5 still on

Final charge Rev East & West P.C.

drawing 304B 8th

1 steam lance in 60" discharge main

No service water at Final C.

Rack on both #1 #5 100% open #1 [illegible])

Pumped 304B to 363A

Trucks

T9 (time) 0

T363A 0 1 T363D 0 T311 0 T312 0 3 T331 0

Acid 0 Others 0

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 6-8-97 JB 13140102.fm

Date 3-29-3 Turn B

Operator Manguel Manager Mcdowell

tar dehydrator on feed 304C, V-4C, showing 55 gpm p452-304A
Primary change Rev 6, 5 still on
Final change Rev East & West
draining 304B 8th
1 steam lance in 60" discharge Main
No service water on at Final C.
took 302's gear pump off 8 20 AM
Lost Overview Flow's at 5/7 and at #3
#3 oper, his Moore ~~Controller~~ are ok System looking
for problem 9 00 AM;
FT 900 Make-up on Man

Trucks

T9 (time) 0

T363A 0 2 T363D 0 T311 0 T312 0 T331 0

Acid 0 Others 4 sulfate, 1923 St in Area;

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 6-8-97 JH 131401 02.frm

Date 3-29-03 Turn 3-11

Operator D. Mack Manager D. Dabbs

Tar Dehydrator on, feed 304C 88 GPM P-452 → 304A.
CC Reversed #5 Primary Plate Cooler.
Reversed east & west final Plate Coolers.
systems worked on water source Computer. (ok now)
pumped some oil into the system.
pumped 8% 304B → 304C.
304B draining at the 8th Cock.
no service water → Btc finals.
Put 1 Coil on 363 A.

Trucks

T9 (time) 0

T363A 0 T363D 0 T311 0 T312 0 T331 0

Acid 0 Others 0

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 6-8-97 JH 13140102.frm

Date 3-30-03 Turn 11-7

Operator D. Mack Manager T. Carter

Tar Dehydrator on, feed 304C 89 GPM R452 → 304A.
C.C. Reversed #5 Primary Plate Cooler.
Reversed east + west final Plate Coolers.
* pumping 304C → 304C.
304B draining at 8th Cock.
No service water on B+C finals.
Koppers is down.
Primary op. Skimmed 302 equalizing line.
302 gear pump is off at 6:00 am.

Trucks

T9 (time) 0

T363A 1 T363D 0 T311 0 T312 0 T331 0

Acid 0 Others 0

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 6-8-97 JH 13140102.frm

Date 3-30-3 Turn B

Operator Marquel Manager Mcdowell

Pumping 306C to 304C STOP!
tar dehydrator on feed 304C Man V-50% p452 to T-304A
Primary change Rev 6, 5 also on Rodded A Venturi
Final change Rev E + W P.C.
draining 304B 8th
System check D-5 LIC going up + down
also FT 900 M/U Flow Pushes S; 304C LIC
A Venturi; Steam out FT900 line looks better
Steaming out equalizing line 302A + B
put 302's gear pump back on 9:15 am
p 304B is ready: put 1 coil 2 now on at 363A
Pumping T-2 T-3 to 306C stop 2-3 when
306C get's to 53%

Trucks

T9 (time) 0

T363A 01 T363D 01 T311 0 T312 0 T331 0

Acid 0 Others 1923 S.T. in Area

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS Rev. 6-8-97 JH 13140102.frm

Date 3-26-03 Turn 3-11

Operator D. mack Manager D. Dabbs

Tar Dehydrator on, 304C started flashing made adjustments to no avail. started flushing 304B. it is flashing also. steamed out 452 → 304A.

C.C. Reversed #5, Primary Plate Cooler.

Reversed east & west final Coolers.

systems install new lic meter D-5 Decanter.

pumping T203 → 306C take to 53%

* pumping oil into system:

304C feed to Dehydrator V.P 19.3

Draining 304B at 8th Cock.

no water → B&C finals.

Trucks

T9 (time) 0

T363A 0 T363D 0 T311 0 T312 0 T331 0

Acid 0 Others 0

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 6-8-97 JH 13140102.frm

Date 3-31-3 Turn 11-7

Operator B Manager TC

Primary; Reversed #6

Finals; Reversed East & West

Dehydrator on manual feed from T-304-C

P-452 → 304-A

Pumping T-301 → 306-C

Stoped pumping T-2 & T-3 → T-306-C

Draining T-304-B 8TH

Had pumper Thruck during Turn

Trucks

T9 (time)

T363A 3 T363D 0 T311 0 T312 0 T331 0

Acid 0 Others

F:All_file/forms/nowforms

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 6-8-97 JH 13140102.frm

Date 3-31-3 Turn B

Operator P Mangual Manager Mcdowell

** Pumping 301 to 306C

tar dehydrator on feed 304C, man V p452 to 304A

Primary change Rev 5, Galson

Final change Rev East-West

drawing 304B #8; (Empty demucker)

No service water on at Final's

Kopper put 304A on recycle

Pumping oil into system + refilling A Demucker stop! 250 pm

** Put the [illegible] p back on keep it

at 400 RPM! if possibly

Took Down #4 Exhuster oil p still on

Mtn pull p T-9A

** Asper 8C, do not drain B Benzol S. pump into system

Trucks

T9 (time) 0

T363A 0.2 T363D 0 T311 0 T312 0 T331 0

Acid 02 Others G + B in Area;

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 6-8-97 HI 13140102.frm

Date 3-31-2003 Turn 3-11

Operator Steve Benge Manager Harry Mendoza

Primary code change was to reversed #5 and #6 are on line.
Reversed the East and West Final Plate cooler.
Air dehydrator is limping running with the fall valve open at 36% 304-C to 304-A.
312-B is set for loading. Pump 425 is going to 311-B
Draining 304-B 8th coil from the bottom.
Not service water is on at the Finals.
* Pumping 301 to 306-C. Take 306-C to 90%
Had the Mill pumper truck in our area.

Trucks

T9 (time) 0

T363A 2 T363D 0 T311 0 T312 0 T331 0

Acid 2 Others 0

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 6-8-97 JH 13140102.frm

Date 4-1-3 Turn 11-7

Operator [illegible] Manager TC

Primary; Reversed #5
Finals; Reversed East & West
Made Adjusted with Dehydrator feed
Still on Manual from T-304-C P-452 → T-304-A
Stoped Pumping T-301 → T-306-C
Put T-301 & T-306-C on Recycle
Pumping T-304-B → T-363-A
Pumped water from T-311

Trucks

T9 (time)

T363A 4 T363D 0 T311 0 T312 0 T331 0

Acid 1 Others

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 6-8-97 JH 13140102.frm

Date 4-1-03 Turn 7-3

Operator D. Mack Manager D. Dabbs

Tar Dehydrator on, flushing with 304B - P-452 → 304A.
C.C. Reversed #6 Primary Plate Cooler.
Reversed east + west final Coolers.
#4 Primary Plate Cooler is Pressureed. *Hot flushing*
finished pumping 304B → 363A.
System's check PLC at 5/7 + #3 pumphouse.
System's check all Transmitters on #4 Exh.
Shut down oil system on #4 Exh.
put plugs in Discharge main east end.
* pumping oil into system. 1:30 pm
Had pumper Truck 1923 in area.
NO service water → bre finals.
Koppers is down.

Trucks

T9 (time) 8:16, 9:11, 10:20, 1:00,

T363A 4 T363D 0 T311 0 T312 1 T331 0

Acid 2 Others 2 front end → B.F.

F:All_file/forms/new/forms

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 6-8-97 JH 13140102.frm

Date 4-1-2003 Turn 3-11

Operator Steve Benoye Manager Harry Mendoza

Primary cooler change was #5 removed. #5 and #6 are on line.

Reversed the East and West Final coolers.

Finished flushing tar dehydrator with P/C tar that had been started on daysturn (1:30 PM).

Pumped Oil into the system, via T-331.

No service water is on at the Fields.

Koppers is still down. 304-A is on recycle.

#3 and #4 Primary coolers are not flushing.

Tar dehydrator is running with 427 on manual 30 % open. 304-C 452 to 304-A.

* Pumping 304-B to 363-A as of 8:35 PM.

304-B is set, 7TH cock from the bottom.

312-B is set for loading. Pump 425 is going to 311-B.

Trucks G+B -

T9 (time) 2:34 PM = 6 loads for the day.

T363A 0 T363D 2 T311 0 T312 1 T331 0

Acid 3 Others 1 Transferred Oil to Plant Furnace

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 6-8-97 JH

13140102.frm

Date 4-2-3 Turn 11-7

Operator 3 Manager TC

PRIMARY; Reversed #4
FINALS; Reversed EAST & WEST
Dehydration feed on manual from T-304-C
P-452 → T-304-A
Stopped pumping T-304-B → T-363-A
Pumping T-301 → T-304-C
#2 Operator took the water off D-5
And put nitrogen on it
Draining T-304-B 7TH

Trucks

T9 (time)

T363A 1 T363D 0 T311 0 T312 0 T331 0

Acid 1 Others

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 6-8-97 JH 13140102.frm

Date 4-2-03 Turn 7-3

Operator D. Mack Manager D. Dabbs

Tar Dehydrator on, feed 304C V.P. 35% P-452 → 304A.
C.S. Reversed #5, Primary Plate Cooler. #4 Hot flushing
Reversed east & west final Plate Coolers.
* pumping 301 → 304C.
systems Checked low Pressure bleeder. (OK)
systems Checked west high Pressure, west on, east off.
Primary opr. Rodded A, B, C Venturi.
D-5 Decanter is back in Service.
Draining 304B at 7th Cock.
No Service water → B+C finals.
Took 1 Coil off 363A.
Koppers is down.
Opened Inlet Value 100% on C Benzol Scrubber.

Trucks

T9 (time) 7:00, 8:25, 9:45, 11:45 12:30, 1:25. 6 Loads Total.

T363A 3 T363D 0 T311 0 T312 0 T331 0

Acid 2 Others 2

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 6-8-97 HI 13140102.fm

Date 4-2-2003 Turn 3-11

Operator Steve Bencze Manager Harry Mendoza

Primary cooler change was #6 reversed. #5 and #6 coolers are on.

Reversed the East and West Final Plate coolers

* Pumping 301 into 304-C.

Tar dehydrator is running at 8 G.P.M. from 304-C to 304-A.

Koppers is down, 304-A is on recycle.

No service water is on at the Finals.

Draining 304-B 8TH cock from the bottom.

Drained water off 311-B and switched tanks.

311-B is set for loading. 425 is going to 312-B.

Had systems blowdown B-Saturator, Acid catcher and Final cooler P.D.I's.

Pumped Oil into the system Via T-331.

The Nitrogen was taken off D-5 at 3:05 P.M.

Trucks Had Mill pumper truck in our area.

T9 (time) 0

T363A 1 T363D 0 T311 1 T312 0 T331 0

Acid 1 Others 0

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 6-8-97 JH 13140102.fm

Date 4-3-3 Turn A

Operator Manguel Manager Mcdowell

tar dehydrator ow feed 304C man p452 to 304A
Primary change Rev 5, 6 still on
Final change Rev E + West PC
draining 304B 8th
Kopper 304A on recycle
Pumping 301 to 304C
drain 5 min oil #5, took sample;
No Service Water on
put on all heat back on T306C
flush tar dehydrator 304B put on Warm recycle
put 306C + 304C on recycle

Trucks

T9 (time) 0

T363A 04 T363D 01 T311 02 T312 0 T331 0

Acid 0 Others 0

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 6-8-97 JH 13140102.frm

Date 4-3-03 Turn 7-3

Operator D. Mack Manager D. Dabbs

Tar Dehydrator on warm Recycle.
C.C. Reversed #6, Primary Plate Cooler. #5 + #6 are on.
Reversed east & west final Plate Coolers.
R 400 east, Kicked out several times. Switched to wi...
* pumping 301 → 304C.
* pumping 304B → 363A.
pumped some oil into system.
R 400 east is Ready for maint.
304 B set at 8th Cock.
no coils on 363 A.
Desulf pumped Tar 1/2 hrs
Had 1923 pumper truck in our area.

Trucks

T9 (time) 7:30, 8:30, 9:40, 10:55, 1:05, 5 Loads Total

T363A 3 T363D 0 T311 5 T312 0 T331 1

Acid 0 Others 2 front end → B.F.

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 6-8-97 JH 13140102.frm

Date 4-3-2003 Turn 3-11

Operator Steve Benage Manager Harry Mendoza

Primary cooler change was #5 reversed. #5 and #6 are on line.
Reversed the East and West Final Plate coolers.
Tar dehydrator is on warm recycle.
Draining 304-B 7TH cock from the bottom.
311-B is set for loading. Pump 425 is going to 312-B.
No service water is on at the Tanks.
Finished pumping 304-B to 363-A.
Took D-5 off Gas Blanketing and put Nitrogen on.
Stopped pumping 301 to 304-C.
*Pumping T2 and T3 to 304-C.
Put 301 back on recycle.

Trucks

T9 (time) 0

T363A 2 T363D 0 T311 1 T312 0 T331 0

Acid 0 Others 1- Frontend Oil to Blast Furnace.

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 6-8-97 JH 13140102.fm

Date 4-4-3 Turn A

Operator C Mangual Manager Madwell

Purging T-2 T-3 to 304C

Primary change Rev 6 5 also still on

Final change Rev East + West PC

Tan dehydrator Down on warm recycle

drawing 304B 8th

No Service water on

Steam out A + C Centrifuge

#3 Put 117B Steam on at Boiler H request 1 00 Am

drain #1 #5 oil reservoir and took sample #5

System check LIC T304C

Trucks

T9 (time) 0

T363A 0 2 T363D 0 1 T311 0 1 T312 0 T331 0

Acid 0 Others 0

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 6-8-97 JH 13140102.fm

Date 4-4-03 Turn 7-3

Operator D. Mock Manager D. Dobbs

Tar Dehydrator on, feed 304C V.P. 30% R452 → 304A.
C.C. Reversed #5 primary Plate Cooler.
Reversed east + west final Plate Cooler.
stopped pumping T2+3 → 304C.
pumped B Benzol Scrubber into system.
pumped some oil into system.
#3 opr. steamed + bled Tar line to 301. (open now)
Draining 304B at 8th cock.

Trucks

T9 (time) 7:37, 9:00, 10:30, 12:09, 1:25 5 Total Loads

T363A 1 T363D 0 T311 3 T312 0 T331 2

Acid 0 Others 0 2 front end → B.F.

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 6-8-97 JH 13140102.frm

Date 4-4-2003 Turn 3-11

Operator Steve Bencze Manager Harry Mendoza

Primary cooler change was #6 reversed. #5 and #6 are on line.
Reversed the East and West Final Plate coolers.
Tar dehydrator is running 304-C to T-9 at 30 G.P.M.
Pumped Oil into the system Via T-331.
Pumped water off 312-B and switched tanks. 312-B is
set for loading. Pump 425 is going to 311-B.
No service water is on at the Finals.
Draining 304-B 8TH cock from the Bottom.
Had the Mill pumper truck in our area.
Put 301 back on recycle.
Rodded out A, B+C Venturis.
Koppers still down. Off recycle.

Trucks

T9 (time) 0

T363A 1 T363D 0 T311 0 T312 1 T331 0

Acid 0 Others 0

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 6-8-97 JH J3140102.fm

Date 4 5 - 3 Turn A

Operator Manguel Manager Mcdowell

tar dehydrator ON feed 304C, 30 gpm p452 to T-9
Primary change Rev 5, 6 also on
Final change Rev East + West P.C.
draining 304B 8th
Kopper is down + out
No Service water ON
Steam out A-C Centrifix
Pumped 304B to 363A
took oil sample from #5, drain 5 min
Pumping 306C to 304C; 306C still on recycle

Need ST 1923 everyone is flooded

Trucks

T9 (time) 0

T363A 0 1 T363D 0 T311 0 T312 0 1 T331 0

Acid 0 Others 0

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 6-8-97 JB 13140102.frm

Date 4-5-03 Turn 7-3

Operator D. mack Manager D. Dabbs

Tar Dehydrator on, feed 304C 30 GPM P-452 → 304A.
C.C. Reversed #6, Primary Plate Cooler 5+6 are on. 3+4 Hot Flush.
Reversed east + west final Coolers.
pumping 306C → 304C, Stop at 10% Then 301 → 306C.
Take 306C 50% Then T2+3 → 306C.
D-5 Decanter is back on line.
Draining 304B at 8th Cock.
No service water → B+C finals.
Koppers on Recycle.
no steam turbines are on.

Trucks

T9 (time) 7:45, 9:40, 10:50, 11:55, 1:20

T363A 0 T363D 0 T311 0 T312 0 T331 0

Acid 0 Others 2 front end → BF

F:All_file/forms/newforms

APR 05 '03 14:12 FR BOOSTER BUILD 2198882214 TO 4269 P.01/03

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 6-8-97 JH 13140102.frm

Date 4-5-3 Turn 3-11

Operator [signature] Manager TC

Primary; Reversed #5

Finals; Reversed EAST & WEST

Dehydrator feed 37 gpm from T-304-C. P-452 → T-304-A

Stoped pumping T-306-C → T-304-C

Draining T-304-B F^TH

The tunnel (walkway) need to be pumped out

D-5 suction is open

T-301 is set to pump to T-306-C

Trucks G&B

T9 (time) 2:20 / 3:25 Seven (7) loads TOTAL

T363A 0 T363D 0 T311 0 T312 0 T331 0

Acid 0 Others 1 front end blast furnace

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 6-8-97 JH 13140102.fm

Date 4-6-3 Turn A

Operator Marquel Manager Mcdowell

tar dehydrator on feed 304C, MAN V-55% P452 To 304A

Primary change Rev 6, 5 is on

Final change Rev E + W.

Pumping T301 to 306C Stop when 306C 50%

No Service water on

#2 Speed Controller Blank-out causing

"Fallback" Com Err, got Fall back Alarms

V-25 #1 Antisurge Controller; put V-25

on MAN. System change Controller Card

put 302's gear p on 1 30/pm 146 speed

put T-9 east pump on T9B p down for Mtce

Had to steam-out Final PD's plugging-up

drain 5 min, sample #5 pump oil to reservoir

Trucks Pumping oil from T331 into system Stop

T9 (time) 0

T363A 0 T363D 0 T311 0 T312 0 T331 0

Acid 0 Others 0

F:All_file/forms/new/forms

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 6-8-97 JH 13140102.frm

Date 4-6-2003 Turn 7-3

Operator Steve Bunge Manager Harry Mendoza

Primary cooler change was #5 reversed. #5 and #6 are on line.

Reversed the East and West Final Plate coolers

* Pumping 301 into 306-C. Stop when 306-C gets to 50%

No service water is on at the Finals.

Koppers still down. 304-A is not on recycle.

Tar dehydrator is running with 427 on manual 37% open, 304-C to 304-A

Had systems blowdown B-Saturator and B-Benzol scrubber P.D.I.'s.

Had pumper truck in our area.

312-B is set for loading. Pump 425 is going to 311-B.

Draining 304-B 8TH cock from the bottom.

Lowered the Stripper stripping steam (FIC-445-A) from 1350 to 1150 as per S. Conway at 12:42 PM.

Trucks G+B

T9 (time) 8:20 AM, 9:55 AM, 11:07 AM, 12:26 PM, 1:48 PM.

T363A 0 T363D 0 T311 0 T312 0 T331 0

Acid 0 Others 0

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 6-8-97 JH 13140102.ftm

Date 4-6-3 Turn 3-11

Operator [illegible] Manager TC

Primary ; Reversed #6
Finals; Reversed East & West
Dehydrator Feed Manual from T-304-C P-452 → T-304-A
Pumping T-301 → T-306-C (Stop at 50%)
Draining T-304-B 8TH
System Checked T-331 Lic

Trucks G & B

T9 (time) 3:00 6 Loads Total

T363A 0 T363D 0 T311 0 T312 1 T331 0

Acid 0 Others

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 6-8-97 JH 13140102.frm

Date 4-7-3 Turn A

Operator Mangal Manager Mcdowell

Pumping 301 to 306C Stop at 50%

Primary Rev #5 6 also ON

Final Rev East + West

Dehydrator feed man V-45 from 304C P452 → T304A

Draining 304B 8th

Kopper put 304A on Recycle

Steam out 427 FIC Control V.

drain 5 min took sample #5

Steam out A + C Centrifuge

Steam out equalizing on 302A + B

A Venturi Moore C. blank out system change Card ok

put two coils on 363D as per Kopper's

Pumped oil T331 into system

Trucks

T9 (time) 0

T363A 3 T363D 0 T311 0 T312 1 T331 0

Acid 0 Others 0

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 6-8-97 JH 13140102.frm

Date 4-7-2003 Turn 7-3

Operator Steve Berge Manager Harry Mendoza

Primary cooler change was #6 secured. #5 and #6 are on line.
Crossed the East and West Final Plate coolers.
The Dehydrator is running with 427 on manual 45% open 304-C then 452 to T-9
304-B is not draining.
312-B is set for loading. Pump 425 is going to 311-B.
No service water is on at the Finish.
Pumped down the Chloride drum.
Finished pumping 301 to 306-C.
Finished filling 304-A. Dehydrator now going to T-9.
Getting ready to pump T-2 + T-3 to 306 C. Steam on line.
Put 301 back on recycle.

Trucks - G + B -

T9 (time) 8:10 AM, 9:35 AM, 11:06 AM, 12:59 AM,

T363A 2 T363D 0 T311 0 T312 3 T331 0

Acid 2 Others 0

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PLANT OPERATOR TURN REPORT COMMENTS

Rev. 6-8-97 III 13140102.frm

Date 4-7-3 Turn 3-11

Operator B Manager TC

Primary; Reversed #5
Finals; Revered East & West
Dehydrator feed on manual, feed from T-304-C
P-452 → T-9
Had mill pumper truck during turn
System check light oil stripper LIC
pumped oil into system
Stoped pumping T-2 & T-3 → T-306-C

Trucks G & B

T9 (time) 3:00 5 Loads

T363A 3 T363D 0 T311 0 T312 2 T331 0

Acid 2 Others

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FQ-8-4

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 6-8-97 III (3140102.frm

Date 4-8-03 Turn 11-7

Operator D. Mack Manager D. Potts

Dehydrator on feed 304C V.P. 25% P-452 → T-9.

C.C. Reversed #6 Primary Plate Cooler. #5+6 on, #3+4 Hot flushing

Reversed east + west final Plate Coolers.

pumped 304B → 363A.

304B set at 8th cock.

Tar line set for T2+3 → 306C.

No service water → B+C finals.

Koppers on Recycle.

No steam turbines are on.

Trucks

T9 (time) 0

T363A 2 T363D 1 T311 0 T312 2 T331 0

Acid 0 Others 0

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PLANT OPERATOR TURN REPORT COMMENTS

Rev. 6-8-97 JH 13140102.frm

Date 4-8-2003 Turn 7-3

Operator Steve Benoze Manager Harry Mendoza

Primary cooler change was #5 reversed #5 and #6 are on line.
Reversed the East and West Final Plate coolers.
Tar dehydrator is running on Manual (FIC427) with valve
30 % open. 304-C thru 452 to T-9.
Draining 304-B 8TH cock from the bottom.
312-B is set for loading. Pump 425 is going to 311-B.
No service water is on at the Finals.
Koppers is still down. 304-A is on recycle.
Resampled T-9 and 304-A for lab.
*Pumping T-2 and T-3 to 306-C.
Had pumper truck in our area.
Mtce. working on installing new Middle Final Plate cooler. (Ready)

Trucks G+B

T9 (time) 8:40 AM.

T363A 1 T363D 0 T311 0 T312 3 T331 2

Acid 4 Others 2-Fractured Oil to Blast Furnace

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PLANT OPERATOR TURN REPORT COMMENTS

Rev. 6-8-97 JH 13140102.frm

Date 4-8-2003 Turn 3-11

Operator Steve Bunge Manager Terry Carter

Primary cooler change was #6 reversed. #5 and #6 are on.

Reversed the East and West Finel Plate coolers.

Tar dehydrator is on manual with 427 - 30 % open. 304-C to T-9.

No service water is on at the Finels.

Koppers is down. 304-A is on recycle.

304-B is draining 8th cock from the bottom.

Drained water off 311-B. 311-B is set for loading. Pump.

425 is going to 312-B.

Systems Clewdown B and C Sat. P.D.I's.

Heated up C-Finel cooler. High PDI's. Called Desuff

* Pumping T-2 and T-3 to 306-C.

Dehydrator is on auto as of 8:00 p.m. 30 G.P.M.

Started pumping Dilute the system at 9:50 P.M

Trucks

T9 (time) 0

T363A 1 T363D 0 T311 1 T312 3 T331 0

Acid 2 Others 1 Frontend sent to Blast Furnace.

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PLANT OPERATOR TURN REPORT COMMENTS

Rev. 6-8-97 JH 13140102.frm

Date 4-9-03 Turn 1-7

Operator D. Mack Manager D. Dabbs

Tar Dehydrator on feed 304C 30 GPM R452 → T9.
C.C. Reversed #5 Primary Plate Cooler.
Reversed east & west final Plate Coolers.
finished pumping T2+3 → 306C.
finished pumping oil into system.
Primary opr. steamed 302 Equalizing line and shut gear-
pump down put 306C back on Recycle.
304B draining at 8th cock.
no service water → B+C finals.
Hoppers still Recycling.

Trucks

T9 (time) 0

T363A 3 T363D 1 T311 2 T312 0 T331 0

Acid 0 Others 0

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PLANT OPERATOR TURN REPORT COMMENTS

Rev. 6-8-97 JH 13140102.frm

Date 4-9-2003 Turn 7-3

Operator Steve Benge Manager Harry Mendoza

Primary cooler change was #6 reversed #5 and #6 are on line.
Reversed the East and Middle Final Plate coolers.
Tar dehydrator is running at 30 G.P.R. from 304-C to T-9.
304-B is draining 8th cock from the bottom.
311-B is set for loading. Pump 426 is going to 312 B.
No service water is On at the Finish.
Koppers is still down. 304-A is on recycle.
Switched Hantoons after systems steamed out the East side. Also
systems tested the Hi and Low pressure bleeders. Switched the
Hi pressure bleeder from West to East.
Heated up C Final Cooler because of high P.D.I.'s Called Dissuff first.
Had to reverse #5 and #6 coolers again about 12:00 P.M. because
of high temps.

Trucks

T9 (time) 0

T363A 2 T363D 0 T311 6 T312 0 T331 0

Acid 3 Others 1- Frontend Oil into T-9

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PLANT OPERATOR TURN REPORT COMMENTS

Rev. 6-8-97 JH 13140102.frm

Date 4-9-3 Turn 3-11

Operator [illegible] Manager TC

Primary; Reversed #5 #6
Finals; Reversed East & West
Dehydrator feed 35 gpm from T-304C. P-452 → T-9
Had mill pumper Thruck during Turn
Draining T-304-B 8TH
Heated final (High PDI) Call ETF
System Add T-331 LIC To Computer

Trucks

T9 (time)

T363A 2 T363D 0 T311 1 T312 0 T331 0

Acid 1 Others

F:All_file/forms/newforms

PLANT OPERATOR TURN REPORT COMMENTS

Rev. 6-8-97 JH 13140102.frm

Date 4-10-03 Turn 11-7

Operator D. Mack Manager D. Dabbs

Tar Dehydrator on, feed 30°C 30 GPM P-452 → T-9.
C.C. Reversed #5 & #6 Primary Plate Coolers.
Reversed east & west Final Plate Coolers.
Pumped 304B → 363A.
Pumped some oil into system.
Reversed #5 again.
Heated up C final cooler called EFF.
Draining 304B at 9th Cock.
No service water → B+C finals.
Took 302 gear pump down at 200 pm.

Trucks

T9 (time) 0

T363A 3 T363D 0 T311 4 T312 0 T331 0

Acid 0 Others 0

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PLANT OPERATOR TURN REPORT COMMENTS

Rev. 6-8-97 JH 13140102.frm

Date 4-10-3 Turn 7-3

Operator [illegible] Manager HM

Primary; Reversed #5 & 6
Finals; Reversed EAST & WEST
Dehydrator feed 35 gpm from T-304-C
P-452 → T-9
Draining T-304-B 8TH
Had mill & G&B pumper TRUCK in Area
Absorber operator TOOK SALT & SLURRY SAMPLER
ALSO PUT P-105-A ON LINE
Maint fixed T-9-B pump. ALSO pulled T-9-A pump
Lowered THE 250# STEAM TO 10500#

Trucks

T9 (time)

T363A 4 T363D 1 T311 2 T312 0 T331 0

Acid 0 Others

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LIGHT OIL / TAR OPERATOR TURN REPORT

Rev. 1/15/01 db 13140103.frm

Date 4/10/03 Turn 3-11

Operator Jimmy S Manager McDowell

Unit	On	Ready	Down
P9A		✓	✓
P9B	✓		
P363A	✓		
P363B		✓	
P363C	✓		
P363D		✓	
SP9A	✓		✓
SP9B		✓	
P204A		✓	
P204B		✓	
P204C	✓		
P207B		✓	
P207C		✓	
P304A	✓	✓	
P304B	✓		
SP304A		✓	✓
SP304B	✓		
CENT SUMP E		✓	
P302A		✓	
P302B		✓	
P309A		✓	
LO DOCK SUMP A		✓	

Unit	On	Ready	Down
P400C	✓	✓	
P400D		✓	
P452A	✓	✓	
P452B		✓	
CHLORIDE N		✓	
CHLORIDE S		✓	
P405A		✓	
P405B		✓	
P414A		✓	
P414B	✓		
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A		✓	
P418B	✓		
P425A	✓		✓
P425B		✓	
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	✓
DIST SUMP M			✓
DIST SUMP S		✓	
SM. DIST SUMP N			✓
SM. DIST SUMP S		✓	

ON means in service
Ready means can be put in service
Down means cannot be put in service

Comments: _____

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LIGHT OIL / TAR OPERATOR TURN REPORT

Rev. 1/15/01 db 13140103.frm

Date 4-10-03 Turn 11-7

Operator JASON Manager DABBS

Unit	On	Ready	Down
P9A			✓
P9B			✓
P363A	✓		
P363B		✓	
P363C	✓		
P363D		✓	
SP9A		✓	
SP9B		✓	
P204A		✓	
P204B		✓	
P204C	✓		
P207B		✓	
P207C			
P304A	✓		
P304B			✓
SP304A		✓	
SP304B		✓	
CENT SUMP E		✓	
P302A		✓	
P302B		✓	
P309A		✓	
LO DOCK SUMP A		✓	

Unit	On	Ready	Down
P400C	✓		
P400D		✓	
P452A	✓		
P452B		✓	
CHLORIDE N		✓	
CHLORIDE S		✓	
P405A		✓	
P405B		✓	
P414A		✓	
P414B	✓		
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A	✓		
P418B		✓	
P425A	✓		
P425B		✓	
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			✓
SM. DIST SUMP S			✓

ON means in service
Ready means can be put in service
Down means cannot be put in service

Comments: _____

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LIGHT OIL / TAR OPERATOR TURN REPORT

Rev. 1/15/01 db 13140103.frm

Date 4-9-03 Turn 11-7

Operator JASON Manager DAGGS

Unit	On	Ready	Down
P9A	✓		
P9B			✓
P363A	✓		
P363B		✓	
P363C	✓		
P363D		✓	
SP9A		✓	
SP9B		✓	
P204A		✓	
P204B		✓	
P204C	✓		
P207B		✓	
P207C		✓	
P304A	✓		
P304B			✓
SP304A		✓	
SP304B		✓	
CENT SUMP E		✓	
P302A		✓	
P302B		✓	
P309A		✓	
LO DOCK SUMP A		✓	

Unit	On	Ready	Down
P400C	✓		
P400D		✓	
P452A	✓		
P452B		✓	
CHLORIDE N		✓	
CHLORIDE S		✓	
P405A		✓	
P405B		✓	
P414A		✓	
P414B	✓		
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A	✓		
P418B		✓	
P425A	✓		
P425B		✓	
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			✓
SM. DIST SUMP S			✓

ON means in service
Ready means can be put in service
Down means cannot be put in service

Comments: _____

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LIGHT OIL / TAR OPERATOR TURN REPORT

Rev. 1/15/01 db 13140103.frm

Date 4-8-03 Turn 11-7

Operator JASON Manager DABBS

Unit	On	Ready	Down
P9A	✓		
P9B			✓
P363A	✓		
P363B		✓	
P363C	✓		
P363D		✓	
SP9A		✓	
SP9B		✓	
P204A		✓	
P204B		✓	
P204C	✓		
P207B		✓	
P207C		✓	
P304A	✓		
P304B			✓
SP304A		✓	
SP304B		✓	
CENT SUMP E		✓	
P302A		✓	
P302B		✓	
P309A		✓	
LO DOCK SUMP A		✓	

Unit	On	Ready	Down
P400C	✓		
P400D		✓	
P452A	✓		
P452B		✓	
CHLORIDE N		✓	
CHLORIDE S		✓	
P405A		✓	
P405B		✓	
P414A		✓	
P414B	✓		
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A	✓		
P418B		✓	
P425A	✓		
P425B		✓	
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			✓
SM. DIST SUMP S			✓

ON means in service
Ready means can be put in service
Down means cannot be put in service

Comments: _____

F:All_file/forms/newforms

LIGHT OIL / TAR OPERATOR TURN REPORT

Rev. 1/15/01 db 13140103.frm

Date 4-9-03 Turn 3-11

Operator Pond Manager Carter

Unit	On	Ready	Down
P9A	✓		
P9B			✓
P363A	✓		
P363B		✓	
P363C	✓		
P363D		✓	
SP9A	✓		
SP9B		✓	
P204A		✓	
P204B		✓	
P204C	✓		
P207B		✓	
P207C		✓	
P304A		✓	
P304B	✓		
SP304A		✓	
SP304B	✓		
CENT SUMP E		✓	
P302A		✓	
P302B		✓	
P309A		✓	
LO DOCK SUMP A		✓	

Unit	On	Ready	Down
P400C	✓		
P400D		✓	
P452A	✓		
P452B		✓	
CHLORIDE N			✓
CHLORIDE S		✓	
P405A		✓	
P405B		✓	
P414A		✓	
P414B	✓		
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A	✓		
P418B		✓	
P425A	✓		
P425B		✓	
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			✓
SM. DIST SUMP S			✓

ON means in service
Ready means can be put in service
Down means cannot be put in service

Comments: _____

F:All_file/forms/newforms

LIGHT OIL / TAR OPERATOR TURN REPORT

Rev. 1/15/01 db 13140103.frm

Date 4-8-03 Turn 3-11

Operator [illegible] Manager [illegible]

Unit	On	Ready	Down
P9A	✓		
P9B			✓
P363A	✓		
P363B		✓	
P363C	✓		
P363D		✓	
SP9A	✓		
SP9B		✓	
P204A		✓	
P204B		✓	
P204C		✓	
P207B		✓	
P207C		✓	
P304A	✓		
P304B		✓	
SP304A	✓		
SP304B	✓		
CENT SUMP E		✓	
P302A		✓	
P302B		✓	
P309A		✓	
LO DOCK SUMP A		✓	

Unit	On	Ready	Down
P400C	✓		
P400D		✓	
P452A	✓		
P452B		✓	
CHLORIDE N			✓
CHLORIDE S		✓	
P405A		✓	
P405B		✓	
P414A		✓	
P414B	✓		
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A	✓		
P418B		✓	
P425A	✓		
P425B		✓	
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			✓
SM. DIST SUMP S			✓

ON means in service
Ready means can be put in service
Down means cannot be put in service

Comments: _____

F:All_file/forms/newforms

LIGHT OIL / TAR OPERATOR TURN REPORT

Rev. 1/15/01 db 13140103.frm

Date 4-8 Turn 7-3

Operator [illegible] Manager Mendoza

Unit	On	Ready	Down
P9A	✓		
P9B			✓
P363A	✓		
P363B		✓	
P363C	✓		
P363D		✓	
SP9A	✓		
SP9B		✓	
P204A		✓	
P204B		✓	
P204C	✓		
P207B		✓	
P207C		✓	
P304A			✓
P304B	✓		
SP304A	✓		
SP304B		✓	
CENT SUMP E		✓	
P302A		✓	
P302B		✓	
P309A		✓	
LO DOCK SUMP A		✓	

Unit	On	Ready	Down
P400C	✓		
P400D		✓	
P452A	✓		
P452B		✓	
CHLORIDE N			✓
CHLORIDE S	✓		
P405A	✓		
P405B		✓	
P414A	✓		
P414B		✓	
P415A	✓	✓	
P415B	✓		
P416A	✓		
P416B		✓	
P418A		✓	
P418B		✓	
P425A	✓		
P425B		✓	
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N		✓	
SM. DIST SUMP S			✓

ON means in service
Ready means can be put in service
Down means cannot be put in service

Comments: _____

F:All_file/forms/newforms

LIGHT OIL / TAR OPERATOR TURN REPORT

Rev. 1/15/01 db 13140103.frm

Date 4-7-03 Turn B-11

Operator Pina Manager Carey

Unit	On	Ready	Down
P9A	✓		
P9B			✓
P363A	✓		
P363B		✓	
P363C	✓		
P363D		✓	
SP9A	✓		
SP9B		✓	
P204A		✓	
P204B		✓	
P204C		✓	
P207B		✓	
P207C		✓	
P304A			✓
P304B	✓		
SP304A		✓	
SP304B	✓		
CENT SUMP E		✓	
P302A		✓	
P302B		✓	
P309A		✓	
LO DOCK SUMP A		✓	

Unit	On	Ready	Down
P400C	✓		
P400D		✓	
P452A	✓		
P452B		✓	
CHLORIDE N		✓	✓
CHLORIDE S		✓	
P405A		✓	
P405B		✓	
P414A		✓	
P414B	✓		
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A	✓		
P418B		✓	
P425A	✓		
P425B		✓	
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			✓
SM. DIST SUMP S			✓

ON means in service
Ready means can be put in service
Down means cannot be put in service

Comments: _____

F:All_file/forms/newforms

LIGHT OIL / TAR OPERATOR TURN REPORT

Rev. 1/15/01 db 13140103.frm

Date 4/7/03 Turn 11-7

Operator Jerry S. Manager McDowell

Unit	On	Ready	Down
P9A	✓		
P9B			✓
P363A	✓		
P363B		✓	
P363C	✓		
P363D		✓	
SP9A	✓	✓	
SP9B	✓	✓	
P204A		✓	
P204B		✓	
P204C		✓	
P207B		✓	
P207C		✓	
P304A	✓		✓
P304B	✓		
SP304A		✓	✓
SP304B	✓		
CENT SUMP E		✓	
P302A		✓	
P302B		✓	
P309A		✓	
LO DOCK SUMP A		✓	

Unit	On	Ready	Down
P400C	✓		
P400D			✓
P452A	✓		
P452B		✓	
CHLORIDE N		✓	
CHLORIDE S		✓	
P405A		✓	✓
P405B		✓	
P414A		✓	✓
P414B	✓		
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A		✓	
P418B	✓		
P425A	✓		
P425B		✓	
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	✓
SM. DIST SUMP N			✓
SM. DIST SUMP S		✓	

ON means in service
Ready means can be put in service
Down means cannot be put in service

Comments: _____

F:All_file/forms/newforms

LIGHT OIL / TAR OPERATOR TURN REPORT

Rev. 1/15/01 db 13140103.frm

Date 4/6/03 Turn 3-11

Operator Jim S. Manager Carter

Unit	On	Ready	Down
P9A	✓		
P9B			✓
P363A	✓		
P363B		✓	
P363C	✓		
P363D		✓	
SP9A	✓	✓	
SP9B	✓		
P204A		✓	
P204B		✓	
P204C		✓	
P207B		✓	
P207C		✓	
P304A		✓	✓
P304B	✓		
SP304A		✓	
SP304B	✓		
CENT SUMP E		✓	
P302A		✓	
P302B		✓	
P309A		✓	
LO DOCK SUMP A		✓	

Unit	On	Ready	Down
P400C	✓		
P400D			✓
P452A	✓		
P452B		✓	
CHLORIDE N		✓	
CHLORIDE S		✓	
P405A		✓	
P405B		✓	
P414A		✓	
P414B	✓		
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A		✓	
P418B	✓		
P425A	✓		
P425B		✓	
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	✓
DIST SUMP M		✓	✓
DIST SUMP S		✓	✓
SM. DIST SUMP N			✓
SM. DIST SUMP S		✓	

ON means in service
Ready means can be put in service
Down means cannot be put in service

Comments: _____

F:All_file/forms/newforms

LIGHT OIL / TAR OPERATOR TURN REPORT

Rev. 1/15/01 db 13140103.frm

Date 4/6/03 Turn 11-7

Operator [illegible] Manager McDowell

Unit	On	Ready	Down
P9A		✓	
P9B	✓		
P363A	✓		
P363B		✓	
P363C		✓	
P363D		✓	
SP9A	✓		
SP9B		✓	
P204A		✓	
P204B		✓	
P204C	✓		
P207B		✓	
P207C		✓	
P304A			✓
P304B	✓		
SP304A	✓	✓	
SP304B	✓		
CENT SUMP E		✓	
P302A		✓	
P302B		✓	
P309A		✓	
LO DOCK SUMP A		✓	

Unit	On	Ready	Down
P400C	✓		
P400D			✓
P452A	✓		
P452B		✓	
CHLORIDE N		✓	
CHLORIDE S		✓	
P405A		✓	
P405B		✓	
P414A		✓	
P414B	✓		
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A		✓	
P418B	✓		
P425A	✓		
P425B		✓	
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			✓
SM. DIST SUMP S		✓	

ON means in service
Ready means can be put in service
Down means cannot be put in service

Comments: _____

F:All_file/forms/newforms

LIGHT OIL / TAR OPERATOR TURN REPORT

Rev. 1/15/01 db 13140103.frm

Date 4/5/03 Turn 11-7

Operator Jerry S. Manager McDowell

Unit	On	Ready	Down
P9A			✓
P9B	✓		
P363A	✓		
P363B		✓	
P363C	✓		
P363D		✓	
SP9A	✓		
SP9B		✓	
P204A		✓	
P204B		✓	
P204C	✓		
P207B	✓		
P207C		✓	
P304A			✓
P304B	✓		
SP304A		✓	
SP304B	✓		
CENT SUMP E		✓	
P302A		✓	
P302B		✓	
P309A		✓	
LO DOCK SUMP A		✓	

Unit	On	Ready	Down
P400C	✓		
P400D			✓
P452A	✓		
P452B		✓	
CHLORIDE N		✓	
CHLORIDE S		✓	
P405A		✓	
P405B		✓	
P414A		✓	
P414B	✓		
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A		✓	
P418B	✓		
P425A	✓		
P425B		✓	
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			✓
SM. DIST SUMP S		✓	

ON means in service
Ready means can be put in service
Down means cannot be put in service

Comments: _____

F:Atl_file/forms/newforms

LIGHT OIL / TAR OPERATOR TURN REPORT

Rev. 1/15/01 db 13140103.frm

Date 4/4/03 Turn 11-7

Operator [illegible] Manager McDowell

Unit	On	Ready	Down
P9A			✓
P9B	✓		
P363A	✓		
P363B		✓	
P363C	✓		
P363D		✓	
SP9A	✓		
SP9B		✓	
P204A		✓	
P204B		✓	
P204C	✓		
P207B		✓	
P207C		✓	
P304A			✓
P304B	✓		
SP304A		✓	
SP304B	✓		
CENT SUMP E		✓	
P302A		✓	
P302B		✓	
P309A		✓	
LO DOCK SUMP A		✓	

Unit	On	Ready	Down
P400C	✓		
P400D			✓
P452A		✓	
P452B		✓	
CHLORIDE N		✓	
CHLORIDE S		✓	
P405A		✓	
P405B		✓	
P414A		✓	
P414B	✓		
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A		✓	
P418B	✓		
P425A	✓		
P425B		✓	
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			✓
SM. DIST SUMP S		✓	

ON means in service
Ready means can be put in service
Down means cannot be put in service

Comments: _____

F:All_file/forms/newforms

LIGHT OIL / TAR OPERATOR TURN REPORT

Rev. 1/15/01 db 13140103.frm

Date 4-3 Turn 3-11

Operator Swann Manager [illegible]

Unit	On	Ready	Down
P9A			✓
P9B	✓		
P363A	✓		
P363B		✓	
P363C	✓		
P363D		✓	
SP9A	✓		
SP9B		✓	
P204A		✓	
P204B		✓	
P204C	✓	✓	
P207B		✓	
P207C		✓	
P304A			✓
P304B	✓		
SP304A	✓		
SP304B		✓	
CENT SUMP E		✓	
P302A		✓	
P302B		✓	
P309A		✓	
I.O DOCK SUMP A		✓	

Unit	On	Ready	Down
P400C	✓		
P400D			✓
P452A		✓	
P452B		✓	
CHLORIDE N			✓
CHLORIDE S		✓	
P405A	✓		
P405B		✓	
P414A	✓		
P414B		✓	
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A		✓	
P418B		✓	
P425A	✓		
P425B		✓	
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N		-	✓
SM. DIST SUMP S			✓

ON means in service
Ready means can be put in service
Down means cannot be put in service

Comments: _____

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LIGHT OIL / TAR OPERATOR TURN REPORT

Rev. 1/15/01 db 13140103.frm

Date 4-3-03 Turn 7-3

Operator JASON Manager DABBS

Unit	On	Ready	Down
P9A			✓
P9B	✓		
P363A	✓		
P363B	✓	✓	
P363C	✓		
P363D		✓	
SP9A		✓	
SP9B		✓	
P204A		✓	
P204B	✓	✓	
P204C	✓		
P207B	✓		
P207C		✓	
P304A			✓
P304B	✓		
SP304A		✓	
SP304B		✓	
CENT SUMP E		✓	
P302A		✓	
P302B		✓	
P309A		✓	
LO DOCK SUMP A		✓	

Unit	On	Ready	Down
P400C	✓		
P400D			✓
P452A		✓	
P452B		✓	
CHLORIDE N		✓	
CHLORIDE S		✓	
P405A		✓	
P405B		✓	
P414A		✓	
P414B	✓		
P415A	✓	✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A		✓	
P418B	✓		
P425A	✓		
P425B		✓	
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			✓
SM. DIST SUMP S			✓

ON means in service
Ready means can be put in service
Down means cannot be put in service

Comments: _____

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LIGHT OIL / TAR OPERATOR TURN REPORT

Rev. 1/15/01 db 13140103.frm

Date 4/3/03 Turn 11-7

Operator Gary S. Manager McDowell

Unit	On	Ready	Down
P9A			✓
P9B	✓		
P363A	✓		
P363B		✓	
P363C	✓		
P363D		✓	
SP9A	✓		
SP9B		✓	
P204A	✓		
P204B		✓	
P204C		✓	
P207B		✓	
P207C		✓	
P304A	✓		
P304B		✓	
SP304A		✓	
SP304B	✓		
CENT SUMP E		✓	
P302A		✓	
P302B		✓	
P309A		✓	
LO DOCK SUMP A		✓	

Unit	On	Ready	Down
P400C		✓	✓
P400D	✓		
P452A	✓		
P452B		✓	
CHLORIDE N		✓	
CHLORIDE S		✓	
P405A		✓	
P405B		✓	
P414A		✓	
P414B	✓		
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A		✓	
P418B	✓		
P425A	✓		
P425B		✓	
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			✓
SM. DIST SUMP S		✓	

ON means in service
Ready means can be put in service
Down means cannot be put in service

Comments: _____

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LIGHT OIL / TAR OPERATOR TURN REPORT

Rev. 1/15/01 db 13140103.frm

Date 4-2-03 Turn 7-3

Operator JASON Manager DABBS

Unit	On	Ready	Down
P9A			✓
P9B	✓		
P363A	✓		
P363B		✓	
P363C	✓		
P363D		✓	
SP9A		✓	
SP9B		✓	
P204A		✓	
P204B		✓	
P204C	✓		
P207B		✓	
P207C		✓	
P304A	✓		
P304B		✓	
SP304A		✓	
SP304B		✓	
CENT SUMP C		✓	
P302A		✓	
P302B		✓	
P309A		✓	
LD DOCK SUMP A		✓	

Unit	On	Ready	Down
P400C		✓	
P400D	✓		
P452A	✓		
P452B		✓	
CHLORIDE N		✓	
CHLORIDE S		✓	
P405A	✓		
P405B		✓	
P414A		✓	
P414B	✓		
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A		✓	
P418B	✓		
P425A	✓		
P425B		✓	
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N	✓		
DIST SUMP M	✓		
DIST SUMP S	✓		
SM. DIST SUMP N			✓
SM. DIST SUMP S	✓		

ON means in service
Ready means can be put in service
Down means cannot be put in service

Comments: _____

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LIGHT OIL / TAR OPERATOR TURN REPORT

Rev. 1/15/01 db 13140103.frm

Date 4-1-03 Turn 7-3

Operator JASON Manager DABBS

Unit	On	Ready	Down
P9A			✓
P9B	✓		
P363A	✓		
P363B		✓	
P363C	✓		
P363D		✓	
SP9A		✓	
SP9B		✓	
P204A		✓	
P204B		✓	
P204C	✓		
P207B		✓	
P207C		✓	
P304A	✓		
P304B		✓	
SP304A		✓	
SP304B		✓	
CENT SUMP E		✓	
P302A		✓	
P302B		✓	
P309A		✓	
I.O DOCK SUMP A		✓	

Unit	On	Ready	Down
P400C		✓	
P400D	✓		
P452A	✓		
P452B		✓	
CHLORIDE N		✓	
CHLORIDE S		✓	
P405A	✓		
P405B		✓	
P414A		✓	
P414B	✓		
P415A		✓	
P415B	✓		
P416A	✓	✓	
P416B	✓		
P418A		✓	
P418B	✓		
P425A	✓		
P425B		✓	
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			✓
SM. DIST SUMP S		✓	

ON means in service
Ready means can be put in service
Down means cannot be put in service

Comments: _____

F:All_file/forms/newforms

LIGHT OIL / TAR OPERATOR TURN REPORT

Rev. 1/15/01 db 13140103.frm

Date 3/31/03 Turn 7-3

Operator [illegible] Manager McDowell

Unit	On	Ready	Down
P9A		✓	
P9B	✓		
P363A	✓		
P363B		✓	
P363C	✓		
P363D		✓	
SP9A	✓		
SP9B		✓	
P204A		✓	
P204B		✓	
P204C		✓	
P207B		✓	
P207C		✓	
P304A	✓		
P304B		✓	
SP304A		✓	
SP304B	✓		
CENT SUMP E		✓	
P302A		✓	
P302B		✓	
P309A		✓	
LO DOCK SUMP A		✓	

Unit	On	Ready	Down
P400C		✓	
P400D	✓		
P452A	✓		
P452B		✓	
CHLORIDE N		✓	
CHLORIDE S			✓
P405A		✓	
P405B		✓	
P414A		✓	
P414B	✓		
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A		✓	
P418B	✓		
P425A	✓		
P425B		✓	
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			✓
SM. DIST SUMP S		✓	

ON means in service
Ready means can be put in service
Down means cannot be put in service

Comments: _____

F:All_file/forms/newforms

LIGHT OIL / TAR OPERATOR TURN REPORT

Rev. 1/15/01 db 13140103.frm

Date 3-29-03 Turn 11-7

Operator [illegible] Manager [illegible]

Unit	On	Ready	Down
P9A		✓	
P9B	✓		
P363A	✓		
P363B		✓	
P363C	✓		
P363D		✓	
SP9A	✓		
SP9B		✓	
P204A	✓		
P204B		✓	
P204C		✓	
P207B		✓	
P207C		✓	
P304A	✓		
P304B		✓	
SP304A		✓	
SP304B	✓		
CENT SUMP E		✓	
P302A		✓	
P302B		✓	
P309A		✓	
LO DOCK SUMP A		✓	

Unit	On	Ready	Down
P400C		✓	
P400D	✓		
P452A	✓		
P452B		✓	
CHLORIDE N		✓	
CHLORIDE S			✓
P405A		✓	
P405B		✓	
P414A		✓	
P414B	✓		
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A	✓		
P418B		✓	
P425A	✓		
P425B		✓	
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			✓
SM. DIST SUMP S		✓	

ON means in service
Ready means can be put in service
Down means cannot be put in service

Comments: _____

F:All_file/forms/newforms

LIGHT OIL / TAR OPERATOR TURN REPORT

Rev. 1/15/01 db 13140103.fmr

Date 3/30/02 Turn 7-3

Operator [illegible] Manager McDowell

Unit	On	Ready	Down
P9A		✓	
P9B	✓		
P363A	✓		
P363B		✓	
P363C	✓		
P363D		✓	
SP9A	✓		
SP9B		✓	
P204A	✓		
P204B		✓	
P204C		✓	
P207B		✓	
P207C		✓	
P304A	✓		
P304B			✓
SP304A		✓	
SP304B	✓		
CENT SUMP E		✓	
P302A		✓	
P302B		✓	
P309A		✓	
LO DOCK SUMP A		✓	

Unit	On	Ready	Down
P400C		✓	
P400D	✓		
P452A	✓		
P452B		✓	
CHLORIDE N		✓	
CHLORIDE S			✓
P405A		✓	
P405B		✓	
P414A		✓	
P414B	✓		
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A		✓	
P418B	✓		
P425A	✓		
P425B		✓	
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			✓
SM. DIST SUMP S		✓	

ON means in service
Ready means can be put in service
Down means cannot be put in service

Comments: _____

F:All_file/forms/newforms

LIGHT OIL / TAR OPERATOR TURN REPORT

Rev. 1/15/01 db 13140103.frm

Date 3-30-03 Turn 11-7

Operator Pres Manager Carter

Unit	On	Ready	Down
P9A		✓	
P9B	✓		
P363A	✓		
P363B		✓	
P363C	✓		
P363D		✓	
SP9A	✓		
SP9B		✓	
P204A	✓		
P204B		✓	
P204C		✓	
P207B	✓		
P207C		✓	
P304A	✓		
P304B			✓
SP304A		✓	
SP304B	✓		
CENT SUMP E		✓	
P302A		✓	
P302B		✓	
P309A		✓	
LO DOCK SUMP A		✓	

Unit	On	Ready	Down
P400C		✓	
P400D	✓		
P452A	✓		
P452B		✓	
CHLORIDE N		✓	
CHLORIDE S			✓
P405A		✓	
P405B		✓	
P414A		✓	
P414B	✓		
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A	✓		
P418B		✓	
P425A	✓		
P425B		✓	
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			✓
SM. DIST SUMP S		✓	

ON means in service
Ready means can be put in service
Down means cannot be put in service

Comments: Maint still working on P-304B

F:All_file/forms/newforms

LIGHT OIL / TAR OPERATOR TURN REPORT

Rev. 1/15/01 db 13140103.frm

Date 3/29/05 Turn 7-3

Operator Jerry S Manager McDowell

Unit	On	Ready	Down
P9A		✓	✓
P9B	✓		
P363A	✓		
P363B		✓	
P363C	✓		
P363D		✓	
SP9A	✓		
SP9B		✓	
P204A	✓		✓
P204B		✓	✓
P204C		✓	
P207B		✓	
P207C		✓	
P304A	✓		
P304B			✓
SP304A		✓	
SP304B	✓		
CENT SUMP E		✓	
P302A		✓	
P302B		✓	
P309A		✓	
LO DOCK SUMP A		✓	

Unit	On	Ready	Down
P400C		✓	
P400D	✓		
P452A	✓		
P452B		✓	
CHLORIDE N		✓	
CHLORIDE S		✓	
P405A		✓	
P405B		✓	
P414A		✓	
P414B	✓		
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A		✓	
P418B	✓		
P425A	✓		
P425B		✓	
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			✓
SM. DIST SUMP S		✓	

ON means in service
Ready means can be put in service
Down means cannot be put in service

Comments: _____

F:All_file/forms/newforms

LIGHT OIL / TAR OPERATOR TURN REPORT

Rev. 1/15/01 db 13140103.frm

Date 3/28/03 Turn 7-3

Operator Jimmy S. Manager McDowell

Unit	On	Ready	Down
P9A		✓	
P9B	✓		
P363A	✓		
P363B		✓	
P363C	✓		
P363D		✓	
SP9A	✓		
SP9B		✓	
P204A			✓
P204B		✓	
P204C		✓	
P207B		✓	
P207C		✓	
P304A	✓		
P304B			✓
SP304A		✓	
SP304B	✓		
CENT SUMP E		✓	
P302A		✓	
P302B		✓	
P309A		✓	
LO DOCK SUMP A		✓	

Unit	On	Ready	Down
P400C		✓	
P400D	✓		
P452A	✓		
P452B		✓	
CHLORIDE N		✓	
CHLORIDE S		✓	
P405A		✓	
P405B		✓	
P414A		✓	
P414B	✓		
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A		✓	
P418B	✓		
P425A	✓		
P425B		✓	
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			✓
SM. DIST SUMP S		✓	

ON means in service
Ready means can be put in service
Down means cannot be put in service

Comments: _____

F:All_file/forms/newforms

LIGHT OIL / TAR OPERATOR TURN REPORT

Rev. 1/15/01 db 13140103.frm

Date 3/27/03 Turn 7-3

Operator Jay S Manager McDowell

Unit	On	Ready	Down
P9A		✓	
P9B	✓		
P363A	✓		
P363B		✓	
P363C	✓		
P363D		✓	
SP9A	✓		
SP9B		✓	
P204A		✓	
P204B		✓	
P204C		✓	
P207B		✓	
P207C		✓	
P304A	✓		
P304B			✓
SP304A		✓	
SP304B	✓		
CENT SUMP E		✓	
P302A		✓	
P302B		✓	
P309A		✓	
LO DOCK SUMP A		✓	

Unit	On	Ready	Down
P400C		✓	
P400D	✓		
P452A	✓		
P452B		✓	
CHLORIDE N		✓	
CHLORIDE S		✓	
P405A		✓	
P405B			✓
P414A		✓	
P414B	✓		
P415A		✓	
P415B	✓		
P416A		✓	
P416B	✓		
P418A		✓	
P418B	✓		
P425A	✓		
P425B		✓	
P438A	System Shutdown		
P438B	System Shutdown		
DIST SUMP N		✓	
DIST SUMP M		✓	
DIST SUMP S		✓	
SM. DIST SUMP N			✓
SM. DIST SUMP S		✓	

ON means in service
Ready means can be put in service
Down means cannot be put in service

Comments: 304-B pump leaking back at 304-C tank.

F:All_file/forms/newforms

EPA-USS-0330929

APPENDIX B. ITEM 3.

Leak Date	Repair Date	Type of Report	Leak	3.a. Tag ID	3.b. Leak ID Method	3.c. Instr Reading	3.d. Initial Attempt	3.e. Final Attempt	3.f./g. WO or Other Docs/Notes	3.h. 2 Mos Prev Monitoring	3.i. 2 Wks Prev. Visual Insps
12/12/05	1/25/06	Incident Report	Faulty valve on skimmer	NS	NS	NS	NS	NS	NS	NS	NS
8/29/05	10/7/05	Incident Report	Pinhole on valve on the 404 stripper	NS	NS	NS	NS	NS	NS	NS	NS
2/24/05	5/20/05	Incident Report	Blockage in drain trench	NS	NS	NS	NS	NS	NS	NS	NS
11/21/03	11/21/03	Incident Report	Packing leak on sump pump	NS	NS	NS	NS	NS	NS	NS	NS
9/15/03	9/18/03	Incident Report	Sump pump packing leaked	NS	NS	NS	NS	NS	NS	NS	NS
3/7/03	3/10/03	Incident Report	Bad seal and broken shaft on sump pump (big south)	NS	NS	NS	NS	NS	NS	NS	NS
11/12/02	11/11/03	Incident Report	Pump packing leaked	NS	NS	NS	NS	NS	NS	NS	NS
11/10/02	11/10/02	Incident Report	Plug blown on heat exchanger	NS	NS	NS	NS	NS	NS	NS	NS
6/25/02	6/26/02	Incident Report	O-ring failed	NS	NS	NS	NS	NS	NS	NS	NS
3/5/07	-	Operator Turn Report	Fitting leaking	NS	NS	NS	NS	NS	NS	NS	NS
3/8/07	-	Oil and Tar Log	Centrifuge sump not working and still leaking	NS	NS	NS	NS	NS	NS	NS	NS
3/19/07	-	Oil and Tar Log	Sump pump packing leaked	NS	NS	NS	NS	NS	NS	NS	NS
6/18/07	-	Oil and Tar Log	P-363B needs to be repacked	NS	NS	NS	NS	NS	NS	NS	NS
9/20/07	-	Oil and Tar Log	P-363B needs to be repacked	NS	NS	NS	NS	NS	NS	NS	NS
9/28/07	-	Operator Turn Report	P-113B packing leaked	NS	NS	NS	NS	NS	NS	NS	NS
11/13/07	-	Oil and Tar Log	P-363B needs to be repacked	NS	NS	NS	NS	NS	NS	NS	NS
1/7/06	-	Operator Turn Report	P-113B leaking	NS	NS	NS	NS	NS	NS	NS	NS
1/29/06	-	Oil and Tar Log	P-304A has blown seal	NS	NS	NS	NS	NS	NS	NS	NS
3/26/06	-	Daily Check-off List	Blown gasket on P-309 line	10151/44580	Visual-daily turn inspection	NA, visual	Taken offline immediately on 3/26/06, repaired same day	3/26/06, monitor confirmation on 3/28/06, 65 ppm	No work order generated	3/28/06, 65 ppm 2/8/06, 2 ppm 1/7/05, 1680 ppm	Attached
8/30/06	-	Oil and Tar Log	Chloride pumps down; south's packing is leaking	NS	NS	NS	NS	NS	NS	NS	NS
10/31/06	-	Operator Turn Report	P-425B has blown seal	10012/44509	Visual-daily turn inspection	10/30/06, 10000 ppm (leak)	Taken offline immediately on 10/30/06, repaired 11/3/06	11/3/06, monitor confirmation on 11/27/06 (data file corrupt, ppm not available, less than 10000 ppm)	No work order generated	11/27/06 (data file corrupt, ppm not available, less than 10000 ppm) 10/30/06, 10000 ppm (leak) 9/27/06, 10 ppm 8/21/06, 6352 ppm	Attached
1/11/05	-	Operator Turn Report	Leak under heat exchanger; P414B sparking from seal	NS	NS	NS	NS	NS	NS	NS	NS
6/1/05	-	Oil and Tar Log	P-415A caught on fire	NS	NS	NS	NS	NS	NS	NS	NS
4/26	-	Operator Turn Report	P-414A discharge valve leaking	NS	NS	NS	NS	NS	NS	NS	NS
4/27	-	Operator Turn Report	P-414A discharge valve leaking	NS	NS	NS	NS	NS	NS	NS	NS
5/7/02	-	Operator Turn Report	P-415B has bad seal	NS	NS	NS	NS	NS	NS	NS	NS
5/8/02	-	Operator Turn Report	P-415A is leaking from seal; P-415B back online	NS	NS	NS	NS	NS	NS	NS	NS
5/11/02	-	Operator Turn Report	P-415A is leaking oil	NS	NS	NS	NS	NS	NS	NS	NS
5/24/02	-	Operator Turn Report	P-415B blew a seal	NS	NS	NS	NS	NS	NS	NS	NS
5/27/02	-	Operator Turn Report	P-415A drained for maintenance	NS	NS	NS	NS	NS	NS	NS	NS
6/2/02	-	Operator Turn Report	P-415A ready if needed, but still needs maintenance	NS	NS	NS	NS	NS	NS	NS	NS

NS = this item or piece of equipment is not in benzene/VHAP service (less than 10%) and therefore not subject to Subpart V requirements.
NA = Not applicable.

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Leak Date	Repair Date	Type of Report	Leak	3.a. Tag ID	3.b. Leak ID Method	3.c. Instr Reading	3.d. Initial Attempt	3.e. Final Attempt	3.f./g. WO or Other Docs/Notes	3.h. 2 Mos Prev Monitoring	3.i. 2 Wks Prev Visual Insps
6/7/02	-	Operator Turn Report	P-415A changed today	NS	NS	NS	NS	NS	NS	NS	NS
7/21/02	-	Operator Turn Report	P-415A packing leaking	NS	NS	NS	NS	NS	NS	NS	NS
8/3/02	-	Operator Turn Report	P-415B leaking, P-415A is down	NS	NS	NS	NS	NS	NS	NS	NS
9/4/02	-	Operator Turn Report	P-9B blown seal; P-452A blown seal; P-405A blown seal removed; P-415A blown seal; P-363C blown seal	NS	NS	NS	NS	NS	NS	NS	NS
9/11/02	-	Operator Turn Report	P-9B pump pulled; P-363C bad seal; P-452A blown seal; P-405A pump pulled; P-415A bad seal	NS	NS	NS	NS	NS	NS	NS	NS
9/12/02	-	Operator Turn Report	P-405A, P-415A, P-9B, P-363C are down	NS	NS	NS	NS	NS	NS	NS	NS
8/28/02	-	Operator Turn Report	P-414B bad seal	NS	NS	NS	NS	NS	NS	NS	NS
10/14/02	-	Operator Turn Report	Repair of P-110A and leak at distillation	NS	NS	NS	NS	NS	NS	NS	NS
11/7/02	-	Operator Turn Report	P-415B down for maintenance	NS	NS	NS	NS	NS	NS	NS	NS
11/10/02	-	Operator Turn Report	Leak on E-452A	NS	NS	NS	NS	NS	NS	NS	NS
11/13/02	11/22/02	Operator Turn Report	P-414B blown seal	NS	NS	NS	NS	NS	NS	NS	NS
12/11/02	-	Operator Turn Report	P-452A down for maintenance repair	10000/44500	Down for regular maintenance, no leak cited	NA, no leak cited	NA, no leak cited	NA, no leak cited	NA, no leak cited	12/19/02, 0 ppm 11/25/02, 20 ppm 10/22/02, 200 ppm	No turn reports available, Apex Doc Mgmt system mandates destruction after 5 years retention
12/12/02	-	Operator Turn Report	Maintenance working on P-425A	10000/44500	Down for regular maintenance, no leak cited	NA, no leak cited	NA, no leak cited	NA, no leak cited	NA, no leak cited	12/19/02, 0 ppm 11/25/02, 20 ppm 10/22/02, 200 ppm	No turn reports available, Apex Doc Mgmt system mandates destruction after 5 years retention
2/25/03	-	Operator Turn Report	Maintenance changing P-113D	NS	NS	NS	NS	NS	NS	NS	NS
4/10/03	-	Operator Turn Report	P-425B down for maintenance	10012/44509	Down for regular maintenance, no leak cited	NA, no leak cited	NA, no leak cited	NA, no leak cited	NA, no leak cited	4/30/03, 5 ppm 3/28/03, 200 ppm 2/28/03, 50 ppm	Attached
4/23/03	-	Operator Turn Report	P-119A down for maintenance; 119A suction valve is broken	NS	NS	NS	NS	NS	NS	NS	NS
10/24/03	-	Operator Turn Report	P-415A down for maintenance	NS	NS	NS	NS	NS	NS	NS	NS
12/18/03	-	Operator Turn Report	Maintenance worked on P-414A, P-414B keeps kicking out	NS	NS	NS	NS	NS	NS	NS	NS

NS = this item or piece of equipment is not in benzene/VHAP service (less than 10%) and therefore not subject to Subpart V requirements.
NA = Not applicable.

EPA-USS-0330930

EPA-R5-2012-0005960000356

UNITED STATES STEEL CORPORATION
RESPONSE TO EPA SECTION 114 REQUEST

ATTACHMENT B
TOTAL ANNUAL BENZENE REPORT - 2006

EPA-R5-2012-0005960000356

U.S. Steel Gary Works - Coke & Chemicals Division
One North Broadway, MS 11-1, Gary, Indiana, 46402

2006
Total Annual Benzene Report

EPA-USS-0330932

EPA-R5-2012-000596000356

USS Gary Works - Coke & Chemicals Division

2006

Benzene Tabulation

Points of Generation Lists

List	Section
Indexes	
COG Condensate	1
Decanter Sampling	2
Pump Sampling, Packing Leakage	3
Tank Sampling/Water Drains	4
Sludge Sources	5
Mtce-Pump Drainage	6
Mtce-Exchangers and Piping Drainage	7
Mtce-Instrumentation and Control Valves	8
Mtce-Strainer Drainage	9
Mtce-Vessel/Tank Draining	10
Miscellaneous	11

The New Steel

EPA-USS-0330933

U.S. Steel Confidential

EPA-R5-2012-0005960000356

USS Gary Works - Coke & Chemicals Division

2006

Benzene Tabulation

EPA-USS-0330934

USS Gary Works - Coal & Coke Division

2006

Total Annual Benzene (TAB)

Section	Waste Streams	Total (Mg)
1	COG Condensate	0.16140
2	Decanter Sampling	0.22377
3	Pump Sampling, Packing Leakage	0.43106
4	Tank Sampling/Water Drains	0.32436
5	Sludge Sources	0.24145
6	Mtce-Pump Drainage	0.02829
7	Mtce-Exchangers and Piping Drainage	0.00116
8	Mtce-Instrumentation and Control Valves	0.05581
	Mtce-Strainer Drainage	0.00145
10	Mtce-Vessel/Tank Draining	0.04146
11	Miscellaneous	0.00009

TAB 1.51031 Mg

No. 3 Coke Oven Battery was shutdown in late 2005, this report reflects zero processing through the auxilliary equipment associated with No. 3 Battery.

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Types of Waste Streams Index

A. Process Waste Water
   1. Coke Oven Gas Condensate
   2. Flushing Liquor
   3. Flushing Liquor/Tar Combined
   4. Light Oil Decanter Water
   5. Distillation Sump Material
   6. Stripped Process Water
B. Product Tank Drawdown
C. Landfill Leachate
D. Process Unit Turnaround
E. Process Materials
   1. Tar
   2. Wash Oil
   3. Amine
   4. Light Oil
   5. Amine Water Wash
   6. Reflux
   7. Stripped Process Water
F. Equipment Maintenance
   1. Tar
   2. Wash Oil
   3. Amine
   4. Light Oil
   5. Flushing Liquor
   6. Flushing Liquor/Tar Combined
   7. Tank Bottoms
   8. Amine Water Wash
   9. Reflux
   10. Stripped Process Water
G. Contact Service Water
   1. COG Condensate
   2. Flushing Liquor
   3. Tar
   4. Wash Oil
H. Recycled Materials
   1. Decanter Sludge
   2. Demucker Sludge
   3. Tank Bottoms
   4. Sumps, Clean Ups, Biosludge, etc
I. Offsite Treatment/Disposal
   1. Reclaimer Waste
J. Onsite Disposal SWD-1 Landfill
   1. Amine Solution Filters

Determination Method for Water Content Index

A. ASTM D 95
B. MSDS
C. Knowledge of waste based on engineering judgment

Benzene Concentration Determination Index

A. Method 8020 - Aromatic Volatile Organics by Gas Chromatography
B. Method 8260 - Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS): Capillary Column Technique
C. Coke Plant Laboratory Results
D. Method 8021 - Volatile Organic Compounds in Water by Purge and Trap Capillary Column Gas Chromatography with Photoionization and Electrolytic Conductivity Detectors

Reporting Year: **2006**

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EPA-USS-0330936

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Section 1
COG Condensate

EPA-USS-0330937

U.S. Steel Confidential

COG Condensate

Waste Stream I.D. #	Description of Waste Stream	Type of Waste Stream	Waste Stream Controlled for Benzene by Subpart FF	Waste Stream Hardpiped Between Two Subpart L Units	Water Content >10% (Y/N)	Determination Method: Water Content	Type of Discharge: (Cont./ Bat.)	Flow Rate	Annual Waste Quantity (gal)	Annual Average Flow Weighted Benzene Concentration (ppm)	Determination Method: Benzene Concentration	Range of Benzene Concentration (mg/l)	Annual Benzene Quantity (Mg)	Return to Process (Y/N)	Tab Component (Y/N)
A	Boilerhouse COG Drip Pit	A1	N	N	Y	C	Batch	ND	ND	1,515	D	0.001 - 16	ND	Y	Y
B	Desulf Fuel Gas Knockout Pot	A1	N	N	Y	C	Batch	ND	ND	ND	D	NA	ND	Y	Y
C	#1 Gas Main Drain	A1	N	N	Y	C	Batch	ND	ND	7.61	D	1.1 - 24.5	ND	Y	Y
D	D5 High Pressure Drip Leg	A1	N	N	Y	C	Batch	ND	ND	24.17	D	1.2 - 80.0	ND	Y	Y
E	D5 Underfiring Drip Leg	A1	N	N	Y	C	Batch	ND	ND	13.58	D	1.1 - 50.0	ND	Y	Y
F	#2 Pumphouse Underfiring Drip Leg	A1	N	N	Y	C	Batch	ND	ND	40.68	D	16 - 110	ND	Y	Y
G	Mtce. Building Drip Tank	A1	N	N	Y	C	Batch	ND	ND	18.7	D	2.3 - 37	ND	Y	Y
H	West of Boilerhouse Drip Tank DT2	A1	N	N	Y	C	Batch	ND	ND	16.80	D	1.49 - 80	ND	Y	Y
I	Old V23 Drip Leg to Final Pumphouse Sump	A1	N	N	Y	C	Batch	ND	ND	15.50	D	5 - 38	ND	Y	Y
J	East Precipitators Drain	A1	N	N	Y	C	Batch	ND	ND	ND	D	NA	ND	Y	Y
K	Middle Precipitator Drain	A1	N	N	Y	C	Batch	ND	ND	ND	D	NA	ND	Y	Y
L	West Precipitator Drain	A1	N	N	Y	C	Batch	ND	ND	ND	D	NA	ND	Y	Y
	TK 1200 Desulf.Drip Legs Tank	A1	N	N	Y	C	Batch	ND	ND	20.32	D	6 - 35	ND	Y	Y
N	Coal Handling Drip Leg	A1	N	N	Y	C	Batch	ND	ND	0.323	D	0.001 - 2.9	ND	Y	Y
O	Coal Handling Gas Main Drain	A1	N	N	Y	C	Batch	ND	ND	1.575	D	0.005 - 16	ND	Y	Y
P	Drip Leg south of T302B: High pressure	A1	N	N	Y	C	Batch	ND	ND	22.50	D	0.005 - 191	ND	Y	Y
Q	5/7 Pumphouse Drip Leg	A1	N	N	Y	C	Batch	ND	ND	1.56	D	0.005 - 13	ND	Y	Y
R	#1 Compressor Suction Main Drain	A1	N	N	Y	C	Batch	ND	ND	1.83	D	0.010 - 11	ND	Y	Y
S	#2 Compressor Suction Main Drain	A1	N	N	Y	C	Batch	ND	ND	1.82	D	0.010 - 11	ND	Y	Y
T	#3 Compressor Suction Main Drain (#3Batt OOS)	A1	N	N	Y	C	Batch	ND	ND	0.82	D	0.010 - 11	ND	Y	Y
U	#4 Compressor Suction Main Drain	A1	N	N	Y	C	Batch	ND	ND	1.83	D	0.010 - 11	ND	Y	Y
V	#5 Compressor Suction Main Drain	A1	N	N	Y	C	Batch	ND	ND	1.82	D	0.010 - 11	ND	Y	Y
W	#2 Battery West/East Basement Underfiring	A1	N	N	Y	C	Batch	ND	ND	23.23	D	4 - 57.4	ND	N	Y
X	#3 Battery Basement West/ East End Condensate (#3Batt OOS)	A1	N	N	Y	C	Batch	ND	ND	13.66	D	2.5 - 51.1	ND	N	Y
Y	#5 Bat. Preheater Center of Pusher Side Alley	A1	N	N	Y	C	Batch	ND	ND	57.80	D	4.7 - 250	ND	N	Y
Z	#7 Bat. Preheater Center of Pusher Side Alley	A1	N	N	Y	C	Batch	ND	ND	39.95	D	0.28 - 191	ND	N	Y
AA	#5/7 Basement Condensate Pusher Side	A1	N	N	Y	C	Batch	ND	ND	23.25	D	0.05 - 98	ND	N	Y
BB	#7 Battery Basement East End Condensate	A1	N	N	Y	C	Batch	ND	ND	33.30	D	0.80 - 194	ND	N	Y
CC	#5 Battery West End Condensate	A1	N	N	Y	C	Batch	ND	ND	30.64	D	8.5 - 130	ND	N	Y
Totals	Coke Plant COG Condensate	A1	N	N	Y	C	Batch	NA	2,570,264	16.59	D	NA	0.16140	Y	Y

TAB 0.16140

Reporting Year: 2006

ND - Not Determined

NA - Not Applicable

Section 1

EPA-R5-2012-0005960000356

Section 2
Decanter Samples

EPA-USS-0330939

Decanter Sampling

Waste Stream I.D. #	Description of Waste Stream	Type of Waste Stream	Waste Stream Controlled for Benzene by Subpart FF	Waste Stream Hardpiped Between Two Subpart L Units	Water Content >10% (Y/N)	Determination Method: Water Content	Type of Discharge: (Cont./ Bat.)	Flow Rate (amt/frequency x %run time)	Unit Out of Service 0=Yes 1=No	Annual Waste Quantity (gal)	Annual Average Flow Weighted Benzene Concentration (ppm)	Determination Method: Benzene Concentration	Range of Benzene Concentration (ppm)	Annual Benzene Quantity (Mg)	Return to Process (Y/N)	Tab Component (Y/N)
75A-(118)	D4 Flushing Decanter Test Cocks	A3	N	N	Y	B	Batch	(2gal/2hrs) x 0.30	1	2,628.00	158.01	D	8.4 - 590	0.001997675	Y	Y
B	D5 Flushing Decanter Test Cocks	A3	N	N	Y	B	Batch	(2gal/2hrs) x 0.90	1	7,884.00	158.01	D	8.4 - 590	0.005993024	Y	Y
76A-(86)	D102A Flushing Decanter Test Cocks	A3	N	N	Y	B	Batch	(0.67gal/4hrs) x 1.0	1	1,467.30	168.33	D	3 - 710	0.001188181	Y	Y
B	D102B Flushing Decanter Test Cocks	A3	N	N	Y	B	Batch	(0.67gal/4hrs) x 1.0	1	1,467.30	168.33	D	3 - 710	0.001188181	Y	Y
77A-(97)	D106A Flushing Decanter Test Cocks (#3Batt OOS)	A3	N	N	Y	B	Batch	(0.67gal/2hrs) x 1.0	0	0.00	112.89	D	17 - 450	0	Y	Y
B	D106B Flushing Decanter Test Cocks (#3Batt OOS)	A3	N	N	Y	B	Batch	(0.67gal/2hrs) x 1.0	0	0.00	112.89	D	17 - 450	0	Y	Y
78A-(90)	D6 Flushing Decanter Test Cocks (#3Batt OOS)	A3	N	N	Y	B	Batch	(0.67gal/4hrs) x 1.0	0	0.00	43.58	D	9 - 84	0	Y	Y
B	D7 Flushing Decanter Test Cocks (#3Batt OOS)	A3	N	N	Y	B	Batch	(0.86gal/2hrs) x 1.0	0	0.00	43.58	D	9 - 84	0	Y	Y
79A-(115)	D5/7N Flushing Decanter Test Cocks	A3	N	N	Y	B	Batch	(0.67gal/2hrs) x 1.0	1	2,934.60	105.28	D	21.80 - 410	0.00148628	Y	Y
B	D5/7S Flushing Decanter Test Cocks	A3	N	N	Y	B	Batch	(0.67gal/2hrs) x 1.0	1	2,934.60	105.28	D	21.80 - 410	0.00148628	Y	Y
80A-(94)	L100B Primary Decanter Test Cocks	A3	N	N	Y	B	Batch	(0.67gal/2hrs) x 1.0	1	2,934.60	1,222.38	D	430 - 2600	0.017256753	Y	Y
B	L100C Primary Decanter Test Cocks	A3	N	N	Y	B	Batch	(2.50gal/2hrs) x 1.0	1	10,950.00	1,222.38	D	430 - 2600	0.064390868	Y	Y
	L100D Primary Decanter Test Cocks	A3	N	N	Y	B	Batch	(2.50gal/2hrs) x 1.0	1	10,950.00	1,222.38	D	430 - 2600	0.064390868	Y	Y
D	L100E Primary Decanter Test Cocks	A3	N	N	Y	B	Batch	(2.50gal/2hrs) x 1.0	1	10,950.00	1,222.38	D	430 - 2600	0.064390868	Y	Y
										55,100.40			TAB	0.22377		

Reporting Year: 2006

( ) - Indicates Higher Flow Weighted Benzene Conc. of two process streams present to calculate TAB

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EPA-USS-0330940

EPA-R5-2012-0005960000356

Section 3

Pump Sampling, Packing Leakage

EPA-USS-0330941

Pump Sampling and Packing Leaks

Waste Stream I.D.#	Description of Waste Stream	Type of Waste Stream	Waste Stream Controlled for Benzene by Subpart FF	Waste Stream Hardpiped Between Two Subpart L Units	Water Content >10% (Y/N)	Determination Method: Water Content	Type of Discharge: (Cont./ Bat.)	Flow Rate (amt x samp time or frequency x %run time)	Unit Out of Service 0=Yes 1=No	Annual Waste Quantity (gal)	Annual Average Flow Weighted Benzene Concentration (ppm)	Determination Method: Benzene Concentration	Range of Benzene Concentration (ppm)	Annual Benzene Quantity (Mg)	Return to Process (Y/N)	Tab Component (Y/N)
81A	P100A Primary Liquor Pump Sampling	A2	N	N	Y	B	Batch	(0.28 gal x 2/week x .55)/2	1	8.01	45.98	D	26.3 - 63.1	0.00000139	Y	Y
B	P100B Primary Liquor Pump Sampling	A2	N	N	Y	B	Batch	(0.28 gal x 2/week x .55)/2	1	8.01	45.98	D	26.3 - 63.1	0.00000139	Y	Y
C	P100C Primary Liquor Pump Sampling	A2	N	N	Y	B	Batch	(0.28 gal x 2/week x .55)/2	1	8.01	45.98	D	26.3 - 63.1	0.00000139	Y	Y
D	P100D Primary Liquor Pump Sampling	A2	N	N	Y	B	Batch	(0.28 gal x 2/week x .55)/2	1	8.01	45.98	D	26.3 - 63.1	0.00000139	Y	Y
E	P100E Primary Liquor Pump Sampling	A2	N	N	Y	B	Batch	(0.28 gal x 2/week x .55)/2	1	8.01	45.98	D	26.3 - 63.1	0.00000139	Y	Y
F	P100F Primary Liquor Pump Sampling	A2	N	N	Y	B	Batch	(0.28 gal x 2/week x .90)/2	1	13.10	45.98	D	26.3 - 63.1	0.00000228	Y	Y
82A	P100A Primary Liquor Pump Packing Leakage	G2	NA	NA	NA	NA	NA	N/A - Mechanical Seal	1	NA	22.28	NA	3.8 -44	NA	NA	N
B	P100B Primary Liquor Pump Packing Leakage	G2	NA	NA	NA	NA	NA	N/A - Mechanical Seal	1	NA	22.28	NA	3.8 -44	NA	NA	N
C	P100C Primary Liquor Pump Packing Leakage	G2	NA	NA	NA	NA	NA	N/A - Mechanical Seal	1	NA	22.28	NA	3.8 -44	NA	NA	N
D	P100D Primary Liquor Pump Packing Leakage	G2	N	N	Y	C	Continuous	(0.0144gal /min) x 0.90	0	0.00	22.28	D	3.8 - 44	0	Y	Y
E	P100E Primary Liquor Pump Packing Leakage	G2	N	N	Y	C	Continuous	(0.0144gal /min) x 1.00	1	756.86	22.28	D	3.8 - 44	6.38221E-05	Y	Y
F	P100F Primary Liquor Pump Packing Leakage	G2	N	N	Y	C	Continuous	(0.0144gal /min) x 0.90	1	6,811.78	22.28	D	3.8 - 44	0.00057440	Y	Y
	P101A Flushing Liquor Pump Sampling	A2	N	N	Y	B	Batch	0.27gal/week x 1.0	1	14.04	10.78	D	3.2 - 16	0.00000057	Y	Y
B	P101B Flushing Liquor Pump Sampling	A2	N	N	Y	B	Batch	0.27gal/week x 1.0	1	14.04	10.78	D	3.2 - 16	0.00000057	Y	Y
84A	P101A Flushing Liquor Pump Packing Leakage	G2	N	N	Y	C	Continuous	(0.0226 gal/min) x 0.99	1	11,759.77	3.18	D	0.001 - 16	0.00014140	Y	Y
B	P101B Flushing Liquor Pump Packing Leakage	G2	N	N	Y	C	Continuous	(0.0226 gal/min) x 1.00	1	11,878.56	3.18	D	0.001 - 16	0.00014283	Y	Y
85A	P101A Primary Cooler Tar Pump Sampling	E1	N	N	Y	A	Batch	0.33 gal /day	1	120.45	1,088.67	D	459 - 3000	0.00049633	Y	Y
B	P101B Primary Cooler Tar Pump Sampling	E1	N	N	Y	A	Batch	0.33 gal /day	1	120.45	1,088.67	D	459 - 3000	0.00049633	Y	Y
86A	P102A #2 Battery Flushing Tar Pump Packing Leakage	E1	N	N	Y	A	Continuous	(183.33 g / min) x .10	1	2,002.29	168.33	D	3 - 710	0.00127571	Y	Y
B	P102A #2 Battery Flushing Tar Pump Sampling	E1	N	N	Y	A	Batch	0.60gal x 3/week x .50	1	46.80	168.33	D	3 - 710	0.00002982	Y	Y
C	P102C #2 Battery Flushing Tar Pump Packing Leakage	E1	N	N	Y	A	Continuous	(183.33 g / min) x .15	1	3,003.44	168.33	D	3 - 710	0.00191356	Y	Y
D	P102C #2 Battery Flushing Tar Pump Sampling	E1	N	N	Y	B	Batch	0.60gal x 3/week x .50	1	46.80	168.33	D	3 - 710	0.00002982	Y	Y
87A	P105A #2 Liquor Bleedoff Pump Packing Leakage	A2	N	N	Y	B	Continuous	(0.0106 gal /min) x 0.95	1	5,292.79	11.15	D	3.5 -49.5	0.00022340	Y	Y
B	P105B #2 Liquor Bleedoff Pump Packing Leakage	A2	N	N	Y	B	Continuous	(0.0106 gal /min) x 0.05	1	278.57	11.15	D	3.5 -49.5	0.00001176	Y	Y
88A	P110A Flushing Liquor Pump Sampling	A2	N	N	Y	B	Batch	0.28gal/week x 1.0	1	14.56	13.99	D	10 - 19	0.00000077	Y	Y
B	P110B Flushing Liquor Pump Sampling	A2	N	N	Y	B	Batch	0.28gal/week x 1.0	1	14.56	13.99	D	10 - 19	0.00000077	Y	Y
89A	P110A Flushing Liquor Pump Packing Leakage	G2	N	N	Y	C	Continuos	(0.0317 gal/min) x 0.99	1	16,494.90	0.97	D	0.001 - 4.14	0.00006053	Y	Y
B	P110B Flushing Liquor Pump Packing Leakage	G2	N	N	Y	C	Continuous	(0.0317 gal/min) x 1.0	1	16,661.52	0.97	D	0.001 - 4.14	0.00006114	Y	Y
90A	P111A #3 Flushing Tar Pump Packing Leakage (#3Batt OOS)	E1	N	N	Y	A	Continuous	(176.11 g / min) x 0.15	0	0.00	43.58	D	9 - 84	0.00000000	Y	Y
B	P111A #3 Flushing Tar Pump Sampling (#3Batt OOS)	E1	N	N	Y	A	Batch	0.30gal x 3/week x .50	0	0.00	43.58	D	9 - 84	0.00000000	Y	Y
C	P111B #3 Flushing Tar Pump Packing Leakage (#3Batt OOS)	E1	N	N	Y	A	Continuous	(176.11 g / min) x 0.15	0	0.00	43.58	D	9 - 84	0.00000000	Y	Y
D	P111B #3 Flushing Tar Pump Sampling (#3Batt OOS)	E1	N	N	Y	A	Batch	0.30gal x 3/week x .50	0	0.00	43.58	D	9 - 84	0.00000000	Y	Y
91A	P111A Final Cooler Liquor Pump Sampling	A2	N	N	Y	B	Batch	0.67 gal x 1/week x 0.33	1	11.50	116.24	D	50 -370	0.00000506	Y	Y
B	P111B Final Cooler Liquor Pump Sampling	A2	N	N	Y	B	Batch	0.67 gal x 1/week x 0.33	1	11.50	116.24	D	50 -370	0.00000506	Y	Y
C	P111C Final Cooler Liquor Pump Sampling	A2	N	N	Y	B	Batch	0.67 gal x 1/week x 0.33	1	11.50	116.24	D	50 -370	0.00000506	Y	Y
D	P111D Final Cooler Liquor Pump Sampling	A2	N	N	Y	B	Batch	0.67 gal x 1/week x 0.33	1	11.50	116.24	D	50 -370	0.00000506	Y	Y
E	P111D Final Cooler Liquor Pump Packing Leakage	A2	N	N	Y	B	Continuous	(0.0144gal /min) x 0.90	1	6,811.78	116.24	D	50 -370	0.00299704	Y	Y
92A	P113A Rich Wash Oil Pump Sampling	E2	N	N	Y	B	Batch	(0.63 gal/day) x 0.10	1	23.00	7,720.55	D	10000 - 14300	0.00067197	Y	Y
B	P113B Rich Wash Oil Pump Sampling	E2	N	N	Y	B	Batch	(0.63 gal/day) x 0.40	1	91.98	7,720.55	D	10001 - 14300	0.00268786	Y	Y
C	P113C Rich Wash Oil Pump Sampling	E2	N	N	Y	B	Batch	(0.63 gal/day) x 0.40	1	91.98	7,720.55	D	10002 - 14300	0.00268786	Y	Y
D	P113D Rich Wash Oil Pump Sampling	E2	N	N	Y	B	Batch	(0.63 gal/day) x 0.10	1	23.00	7,720.55	D	10003 - 14300	0.00067197	Y	Y
93A	P114A #3 Flushing Liquor Bleedoff Pump Packing Leakage (#3Batt OOS)	A2	N	N	Y	C	Continuous	(0.0079 gal/ min) x 0.95	0	0.00	6.93	D	3 -15	0.00000000	Y	Y
B	P114B #3 Flushing Liquor Bleedoff Pump Packing Leakage (#3Batt OOS)	A2	N	N	Y	C	Continuous	(0.0079 gal/ min) x 0.05	0	0.00	6.93	D	3 -15	0.00000000	Y	Y
94	P115 Primary Cooler Tar Pump Sampling	E1	N	N	Y	A	Batch	0.25gal x 7/week x 1.0	1	91.00	1,222.38	D	430 - 2600	0.00042103	Y	Y
95A	P117A Flushing Liquor Pump Sampling	A2	N	N	Y	B	Batch	0.20gal/week x 1.0	1	10.40	12.36	D	9.6 - 16	0.00000049	Y	Y
B	P117B Flushing Liquor Pump Sampling	A2	N	N	Y	B	Batch	0.20gal/week x 1.0	1	10.40	12.36	D	9.6 - 16	0.00000049	Y	Y
96A	P117A Flushing Liquor Pump Packing Leakage	G2	N	N	Y	C	Continuous	(0.0159 gal/min) x 0.99	1	8,273.47	0.1956	D	0.003 - 0.78	0.00000612	Y	Y
B	P117B Flushing Liquor Pump Packing Leakage	G2	N	N	Y	C	Continuous	(0.0159 gal/min) x 1.0	1	8,357.04	0.1956	D	0.003 - 0.78	0.00000619	Y	Y

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Pump Sampling and Packing Leaks

Waste Stream I.D.#	Description of Waste Stream	Type of Waste Stream	Waste Stream Controlled for Benzene by Subpart FF	Waste Stream Hardpiped Between Two Subpart L Units	Water Content >10% (Y/N)	Determination Method: Water Content	Type of Discharge: (Cont./ Bat.)	Flow Rate (amt x samp time or frequency x %run time)	Unit Out of Service 0=Yes 1=No	Annual Waste Quantity (gal)	Annual Average Flow Weighted Benzene Concentration (ppm)	Determination Method: Benzene Concentration	Range of Benzene Concentration (ppm)	Annual Benzene Quantity (Mg)	Return to Process (Y/N)	Tab Component (Y/N)
97A	P118A #3 Flushing Tar Pump Packing Leakage (#3Batt OOS)	E1	N	N	Y	A	Continuous	(155.38 g / min) x 0.20	0	0.00	112.89	D	17 - 450	0.00000000	Y	Y
B	P118A #3 Flushing Tar Pump Sampling (#3Batt OOS)	E1	N	N	Y	A	Batch	0.50 gal x 3/week x 0.95	0	0.00	112.89	D	17 - 450	0.00000000	Y	Y
C	P118B #3 Flushing Tar Pump Packing Leakage (#3Batt OOS)	E1	N	N	Y	A	Continuous	(155.38 g / min) x 0.15	0	0.00	112.89	D	17 - 450	0.00000000	Y	Y
D	P118B #3 Flushing Tar Pump Sampling (#3Batt OOS)	E1	N	N	Y	A	Batch	0.50 gal x 3/week x 0.05	0	0.00	112.89	D	17 - 450	0.00000000	Y	Y
98	P119E Napth Scrubber Liquor Pump Packing Leakage	A2	N	N	Y	B	Continuous	(0.0063 gal/ min) x 0.05	1	165.56	52.75	D	15 - 103	0.00003305	Y	Y
99A	P204A Tar Pump Packing Leakage	E1	N	N	Y	A	Continuous	(227.21 g / min) x 0.01	1	248.15	795.77	D	110 - 1700	0.000747436	Y	Y
B	P204B Tar Pump Packing Leakage	E1	N	N	Y	A	Continuous	(227.21 g / min) x 0.01	1	248.15	795.77	D	110 - 1700	0.000747436	Y	Y
C	P204C Tar Pump Packing Leakage	E1	N	N	Y	A	Continuous	(227.21 g / min) x 0.01	1	248.15	795.77	D	110 - 1700	0.000747436	Y	Y
D	P207B Tar Pump Packing Leakage	E1	N	N	Y	A	Continuous	(227.21 g / min) x 0.10	1	248.15	795.77	D	110 - 1700	0.000747436	Y	Y
F	P204A Tar Pump Sampling	E1	N	N	Y	A	Batch	0.57 gal x 7/week x 0.01	1	2.07	795.77	D	110 - 1700	0.00000625	Y	Y
G	P204B Tar Pump Sampling	E1	N	N	Y	A	Batch	0.57 gal x 7/week x 0.20	1	41.50	795.77	D	110 - 1700	0.00012499	Y	Y
H	P204C Tar Pump Sampling	E1	N	N	Y	A	Batch	0.57 gal x 7/week x 0.01	1	2.07	795.77	D	110 - 1700	0.00000625	Y	Y
I	P207B Tar Pump Sampling	E1	N	N	Y	A	Batch	0.57 gal x 7/week x 0.01	1	2.07	795.77	D	110 - 1700	0.00000625	Y	Y
J	P207C Tar Pump Sampling	E1	N	N	Y	A	Batch	0.57 gal x 7/week x 0.10	1	20.75	795.77	D	110 - 1700	0.00006249	Y	Y
100A	P304A Tar Pump Sampling	E1	N	N	Y	A	Batch	0.67 gal x 3/week x 0.50	1	44.46	87.14	D	3 - 520	0.00001466	Y	Y
100B	P304B Tar Pump Sampling	E1	N	N	Y	A	Batch	0.67 gal x 3/week x 0.50	1	44.46	87.14	D	3 - 520	0.00001466	Y	Y
101A	P209A Tar Pump Packing Leakage	E1	N	N	Y	A	Continuous	(167.23 g / min) x 0.30	1	5,479.35	51.56	D	19.2 - 110	0.00106923	Y	Y
B	P209B Tar Pump Packing Leakage	E1	N	N	Y	A	Continuous	(167.23 g / min) x 0.30	1	5,479.35	51.56	D	19.2 - 110	0.00106923	Y	Y
C	P209A Tar Pump Sampling	E1	N	N	Y	A	Batch	0.63 gal x 1/week x 0.30	1	9.83	51.56	D	19.2 - 110	0.00000192	Y	Y
D	P209B Tar Pump Sampling	E1	N	N	Y	A	Batch	0.63 gal x 1/week x 0.30	1	9.83	51.56	D	19.2 - 110	0.00000192	Y	Y
102A	P2D Flushing Liquor Pump Sampling	A2	N	N	Y	B	Batch	0.25gal/week x 1.0	1	13.00	10.09	D	6.6 - 14	0.00000050	Y	Y
B	P2E Flushing Liquor Pump Sampling	A2	N	N	Y	B	Batch	0.25gal/week x 1.0	1	13.00	10.09	D	6.6 - 14	0.00000050	Y	Y
103A	P2D Flushing Liquor Pump Packing Leakage	G2	N	N	Y	C	Continuous	(0.0159 gal/min) x 0.99	1	8,273.47	0.0071	D	0.001 - 0.028	0.00000022	Y	Y
B	P2E Flushing Liquor Pump Packing Leakage	G2	N	N	Y	C	Continuous	(0.0159 gal/min) x 1.0	1	8,357.04	0.0071	D	0.001 - 0.028	0.00000023	Y	Y
104A	P363A Tar Pump Packing Leakage	E1	N	N	Y	A	Continuous	(246.42 g / min) x 1.0	1	26,913.46	453.54	D	16 - 1420	0.04620114	Y	Y
B	P363B Tar Pump Packing Leakage	E1	N	N	Y	A	Continuous	(246.42 g / min) x 1.0	1	26,913.46	453.54	D	16 - 1420	0.04620114	Y	Y
C	P363C Tar Pump Packing Leakage	E1	N	N	Y	A	Continuous	(246.42 g / min) x 1.0	1	26,913.46	453.54	D	16 - 1420	0.046201137	Y	Y
D	P363D Tar Pump Packing Leakage	E1	N	N	Y	A	Continuous	(246.42 g / min) x 1.0	1	26,913.46	453.54	D	16 - 1420	0.046201137	Y	Y
E	P363A Tar Pump Sampling	E1	N	N	Y	A	Batch	0.83 gal x 5/week x 1.0	1	215.80	453.54	D	16 - 1420	0.000370454	Y	Y
F	P363B Tar Pump Sampling	E1	N	N	Y	A	Batch	0.83 gal x 5/week x 1.0	1	215.80	453.54	D	16 - 1420	0.000370454	Y	Y
G	P363C Tar Pump Sampling	E1	N	N	Y	A	Batch	0.83 gal x 5/week x 1.0	1	215.80	453.54	D	16 - 1420	0.000370454	Y	Y
104H	P363D Tar Pump Sampling	E1	N	N	Y	A	Batch	0.83 gal x 5/week x 1.0	1	215.80	453.54	D	16 - 1420	0.00037045	Y	Y
105A	P3A Flushing Tar Pump Sampling	E1	N	N	Y	A	Batch	0.57 gal x 5/week x .50	1	74.10	127.62	D	20.3 - 450	0.00003579	Y	Y
B	P3C Flushing Tar Pump Sampling	E1	N	N	Y	A	Batch	0.57 gal x 5/week x .50	1	74.10	127.62	D	20.3 - 450	0.00003579	Y	Y
106A	P3A Flushing Tar Pump Packing Leakage	G3	N	N	Y	C	Continuous	(174.43 g / min) x 0.15	1	2,857.63	104.37	D	7 - 320	0.00112887	Y	Y
B	P3C Flushing Tar Pump Packing Leakage	G3	N	N	Y	C	Continuous	(174.43 g / min) x 0.15	1	2,857.63	104.37	D	7 - 320	0.00112887	Y	Y
107A	P414A Light Oil Decanter Water Pump Packing Leakage	A4	N	N	Y	B	Continuous	(0.0159 gal/min) x 0.50	1	4,178.52	672.57	D	220 - 1260	0.01063719	Y	Y
B	P414B Light Oil Decanter Water Pump Packing Leakage	A4	N	N	Y	B	Continuous	(0.0159 gal/min) x 0.50	1	4,178.52	672.57	D	220 - 1260	0.01063719	Y	Y
108A	P415A Lean Wash Oil Pump Cooling Water on Pump Jacket	G4	N	N	Y	C	Continuous	(2.31 gal/min) x 0.50	1	607,068.00	4.65	D	0.002 38	0.01067452	Y	Y
B	P415B Lean Wash Oil Pump Cooling Water on Pump Jacket	G4	N	N	Y	C	Continuous	(2.31 gal/min) x 0.50	1	607,068.00	4.65	D	0.002 38	0.01067452	Y	Y
C	P415C Lean Wash Oil Pump Cooling Water on Pump Jacket	G4	N	N	Y	C	Continuous	(2.31 gal/min) x 0.50	1	607,068.00	4.65	D	0.002 38	0.010674522	Y	Y
109A	P415A Lean Wash Oil Pump Packing Leakage	G4	N	N	Y	C	Continuous	0.0226 gal/min x 0.50	1	5,939.28	55.16	D	0.002 - 390	0.001239986	Y	Y
B	P415B Lean Wash Oil Pump Packing Leakage	G4	N	N	Y	C	Continuous	0.0226 gal/min x 0.50	1	5,939.28	55.16	D	0.002 - 390	0.001239986	Y	Y
C	P415C Lean Wash Oil Pump Packing Leakage	G4	N	N	Y	C	Continuous	0.0226 gal/min x 0.50	1	5,939.28	55.16	D	0.002 - 390	0.001239986	Y	Y
110A	P415A Lean Wash Oil Pump Sampling	E2	N	N	Y	C	Batch	0.63 gal x 3/week x 0.50	1	49.14	609.33	D	218 - 1600	0.000113333	Y	Y
B	P415B Lean Wash Oil Pump Sampling	E2	N	N	Y	C	Batch	0.63 gal x 3/week x 0.50	1	49.14	609.33	D	218 - 1600	0.000113333	Y	Y
C	P415C Lean Wash Oil Pump Sampling	E2	N	N	Y	C	Batch	0.63 gal x 3/week x 0.50	1	49.14	609.33	D	218 - 1600	0.000113333	Y	Y
113A	P5/7 Electric Liquor Pump Sampling	A2	N	N	Y	B	Batch	0.20gal/week x 1.0	1	10.40	9.39	D	7.5 - 15	0.000000370	Y	Y

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Pump Sampling and Packing Leaks

Waste Stream I.D.#	Description of Waste Stream	Type of Waste Stream	Waste Stream Controlled for Benzene by Subpart FF	Waste Stream Hardpiped Between Two Subpart L Units	Water Content >10% (Y/N)	Determination Method: Water Content	Type of Discharge: (Cont./ Bat.)	Flow Rate (amt x samp time or frequency x %run time)	Unit Out of Service 0=Yes 1=No	Annual Waste Quantity (gal)	Annual Average Flow Weighted Benzene Concentration (ppm)	Determination Method: Benzene Concentration	Range of Benzene Concentration (ppm)	Annual Benzene Quantity (Mg)	Return to Process (Y/N)	Tab Component (Y/N)
B	P5/7 Steam Liquor Pump Sampling	A2	N	N	Y	B	Batch	0.20gal/week x 1.0	1	10.40	9.39	D	7.5 - 15	0.000000370	Y	Y
114A	P5/7 Electric Liquor Pump Packing Leakage	G2	N	N	Y	C	Continuous	0.0317 gal/min x 0.99	1	16,494.90	1.15	D	0.001 - 10.2	0.000072076	Y	Y
B	P5/7 Steam Liquor Pump Packing Leakage	G2	N	N	Y	C	Continuous	0.0317 gal/min x 1.0	1	16,661.52	1.15	D	0.001 - 10.2	0.000072804	Y	Y
115A	P5/7 Push Pull Tar Pump East Sampling	E1	N	N	Y	A	Batch	0.25 gal x 3/week x 0.50	1	19.50	105.28	D	21.8 - 410	0.000007770	Y	Y
B	P5/7 Push Pull Tar Pump West Sampling	E1	N	N	Y	A	Batch	0.25 gal x 3/week x 0.50	1	19.50	105.28	D	21.8 - 410	0.000007770	Y	Y
115C	P5/7 Push Pull Tar Pump East Packing Leakage	E1	N	N	Y	A	Batch	(100.23 g / min) x 0.25	1	2,736.73	105.28	D	21.8 - 410	0.001090544	Y	Y
D	P5/7 Push Pull Tar Pump West Packing Leakage	E1	N	N	Y	A	Batch	(100.23 g / min) x 0.25	1	2,736.73	105.28	D	21.8 - 410	0.001090544	Y	Y
116A	P5A Liquor Storage Pump Packing Leakage	A2	N	N	Y	B	Continuous	0.0106 gal/min x 0.30	0	0.00	14.76	D	6.9 - 24.9	0	Y	Y
B	P5A Liquor Storage Pump Sampling	A2	N	N	Y	B	Batch	0.19 gal x 6 samples x 0.50	0	0.00	14.76	D	6.9 - 24.9	0	Y	Y
C	P5B Liquor Storage Pump Packing Leakage	A2	N	N	Y	B	Continuous	0.0106 gal/min x 0.30	0	0.00	14.76	D	6.9 - 24.9	0	Y	Y
D	P5B Liquor Storage Pump Sampling	A2	N	N	Y	B	Batch	0.19 gal x 6 samples x 0.50	0	0.00	14.76	D	6.9 - 24.9	0	Y	Y
117A	P700M Liquor Storage Pump Packing Leakage	A2	N	N	Y	B	Continuous	0.0053 gal/min x 0.33	0	0.00	8.60	D	2.4 - 22	0	Y	Y
B	P700M Liquor Storage Pump Sampling	A2	N	N	Y	B	Batch	0.20 gal x 6/month x 0.33	0	0.00	8.60	D	2.4 - 22	0	Y	Y
C	P700N Liquor Storage Pump Packing Leakage	A2	N	N	Y	B	Continuous	0.0053 gal/min x 0.33	0	0.00	8.60	D	2.4 - 22	0	Y	Y
D	P700N Liquor Storage Pump Sampling	A2	N	N	Y	B	Batch	0.20 gal x 6/month x 0.33	0	0.00	8.60	D	2.4 - 22	0	Y	Y
E	P700S Liquor Storage Pump Packing Leakage	A2	N	N	Y	B	Continuous	0.0053 gal/min x 0.33	0	0.00	8.60	D	2.4 - 22	0	Y	Y
F	P700S Liquor Storage Pump Sampling	A2	N	N	Y	B	Batch	0.20 gal x 6/month x 0.33	0	0.00	8.60	D	2.4 - 22	0	Y	Y
118A	P7E Flushing Tar Pump Packing Leakage	E1	N	N	Y	A	Batch	(172.33 g / min) x 0.25	1	4,705.38	158.01	D	8.4 - 590	0.00281419	Y	Y
B	P7E Flushing Tar Pump Sampling	E1	N	N	Y	A	Batch	(0.21gal x 3/week) x .50	1	16.38	158.01	D	8.4 - 590	0.00000980	Y	Y
C	P7F Flushing Tar Pump Packing Leakage	E1	N	N	Y	A	Batch	(172.33 g / min) x 0.25	1	4,705.38	158.01	D	8.4 - 590	0.00281419	Y	Y
D	P7F Flushing Tar Pump Sampling	E1	N	N	Y	A	Batch	0.21gal x 3/week x 0.50	1	16.38	158.01	D	8.4 - 590	0.00000980	Y	Y
153A	P9A Blend Fuel Pump Sampling	E1	N	N	Y	A	Batch	0.25 gal x 5/week x 0.50	1	32.50	70.88	D	2.4 - 250	0.00000872	Y	Y
B	P9B Blend Fuel Pump Sampling	E1	N	N	Y	A	Batch	0.25 gal x 5/week x 0.50	1	32.50	70.88	D	2.4 - 250	0.00000872	Y	Y
C	P452A Blend Fuel Tar Pump Sampling	E1	N	N	Y	A	Batch	0.30 gal x 7/week x 0.30	1	32.76	70.88	D	2.4 - 250	0.00000879	Y	Y
D	P452B Blend Fuel Tar Pump Sampling	E1	N	N	Y	A	Batch	0.30 gal x 7/week x 0.30	1	32.76	70.88	D	2.4 - 250	0.00000879	Y	Y
183A	N Distillation Sump Pump Sampling	A2	N	N	Y	C	Batch	0.30 gal x 1/week x 0.30	1	4.68	26.16	D	2.7 - 105.0	0.00000046	Y	Y
B	S Distillation Sump Pump Sampling	A2	N	N	Y	C	Batch	0.30 gal x 1/week x 0.30	1	4.68	26.16	D	2.7 - 105.0	0.00000046	Y	Y
C	M Distillation Sump Pump Sampling	A2	N	N	Y	C	Batch	0.30 gal x 1/week x 0.30	1	4.68	26.16	D	2.7 - 105.0	0.00000046	Y	Y
187-(104)	Centrifuge Sump	G1	N	N	Y	C	Batch		1	18922	453.54	D	16 - 1420	0.03248255	Y	Y
	Environmental Treatment Facility - Desulfurization Plant															
146A	P1730 Rich Amine Pump	E3	N	N	Y	C	Batch	(0.17 gal x 0.50) / day	1	31.03	27.58	D	15 - 50	0.00000324	Y	Y
B	P1740 Rich Amine Pump	E3	N	N	Y	C	Batch	(0.17 gal x 0.50) / day	1	31.03	27.58	D	15 - 50	0.00000324	Y	Y
147A	P1750 Lean Amine Pump	E3	N	N	Y	C	Batch	(0.16 gal x 0.50) / 8 hours	1	87.60	4.49	D	0.002 - 29	0.0000014891	Y	Y
B	P1760 Lean Amine Pump	E3	N	N	Y	C	Batch	(0.16 gal x 0.50) / 8 hours	1	87.60	4.49	D	0.002 - 29	0.0000014891	Y	Y
148A	P1710 Amine Water Wash Pump	E5	N	N	Y	C	Batch	(0.19 gal x 0.50) x 2/day	1	69.35	21.33	D	11 - 40	0.00000560	Y	Y
B	P1720 Amine Water Wash Pump	E5	N	N	Y	C	Batch	(0.19 gal x 0.50) x 2/day	1	69.35	21.33	D	11 - 40	0.00000560	Y	Y
149A	P1790Rich Reflux Pump	E6	N	N	Y	C	Batch	(0.19 gal x 0.50) / day	1	34.68	11.27	D	5 - 21	0.00000148	Y	Y
B	P1800 Rich Reflux Pump	E6	N	N	Y	C	Batch	(0.19 gal x 0.50) / day	1	34.68	11.27	D	5 - 21	0.00000148	Y	Y
150A	P2510 Lean Reflux Pump	E6	N	N	Y	C	Batch	(0.21 gal x 0.50) x 2/day	1	76.65	5.85	D	0.01 - 32	0.00000170	Y	Y
B	P2520 Lean Reflux Pump	E6	N	N	Y	C	Batch	(0.21 gal x 0.50) x 2/day	1	76.65	5.85	D	0.01 - 32	0.000001697	Y	Y
151A	P1770 Reclaimer Pump	E3	N	N	Y	C	Batch	(0.19 gal x 0.50) x 2/day	1	69.35	0.45	D	0.001 - 9	0.00000012	Y	Y
B	P1780 Reclaimer Pump	E3	N	N	Y	C	Batch	(0.19 gal x 0.50) x 2/day	1	69.35	0.45	D	0.001 - 9	0.00000012	Y	Y
C	P1770/1780 Reclaimer to Off-site treatment	I1	N	N	Y	C	Batch	277,811	1	277,811	0.45	D	0.001 - 9	0.00047809	Y	Y
	Environmental Treatment Facility - Waste Water Treatment Plant (WWTP)															
162	P7110A/B/C Still Feed Pump Sampling	A2	N	N	Y	C	Batch	0.25 gal/day	1	91	10.08	D	8.9 - 12	0.00000348	Y	Y
163	P7200 Still Bottom Pumps (Still Effluent) to T7300 (process water blowdown FT-7200J)	A6	N	N	Y	C	Batch	123,513,443	1	123,513,443	0.263	D	0 - 2	0.1229630	Y	Y

TAB 0.43106

Reporting Year: 2006

NA - Not Applicable

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EPA-USS-0330944

EPA-R5-2012-0005960000356

Section 4

Tank Drains/ Water Drains

EPA-USS-0330945

Waste Stream I.D. #	Description of Waste Stream	Type of Waste Stream	Waste Stream Controlled for Benzene by Subpart FF	Waste Stream Hardpiped Between Two Subpart L Units	Water Content >10% (Y/N)	Determination Method: Water Content	Type of Discharge: (Cont./ Bat.)	Flow Rate Amount/Frequency	Unit in Service? or Any Draining? 1=Yes 0=No	Annual Waste Quantity (gal or Kg)	Annual Average Flow Weighted Benzene Concentration (ppm)	Determination Method: Benzene Concentration	Range of Benzene Concentration (ppm)	Annual Benzene Quantity (Mg)	Return to Process (Y/N)	Tab Component (Y/N)
119-(118)	B101 Liquor Bleedoff Tank Bottom Draining	A3	N	N	Y	B	Batch	20 gal/8 hours	1	21,900.00	158.01	D	8.4 - 590	0.013097962	Y	Y
120-(97)	B104 Liquor Bleedoff Tank Bottom Draining (#3Batt OOS)	A3	N	N	Y	B	Batch	20 gal/8 hours	0	0.00	112.89	D	17 - 450	0	Y	Y
121A-(118)	T2 Flushing Tar Storage Tank Sampling	B	N	N	Y	B	Batch	10.67/day	1	3,894.55	158.01	D	8.4 - 590	0.002960443	Y	Y
121B-(118)	T2 Flushing Tar Storage Tank Water Draining	B	N	N	Y	B	Batch	10.67/day	0	0.00	158.01	D	8.4 - 590	0	Y	Y
122A-(86)	T3 Flushing Tar Storage Tank Sampling	B	N	N	Y	B	Batch	10.67/day	1	3,894.55	168.33	D	3 - 710	0.003153703	Y	Y
122B-(86)	T3 Flushing Tar Storage Tank Water Draining	B	N	N	Y	B	Batch	10.67/day	0	0.00	168.33	D	3 - 710	0	Y	Y
123A	T6 Flushing Liquor Storage Tank Sampling (OOS)	A3	N	N	Y	B	Batch	3450 gal / week	0	0.00	26.12	D	6.8 - 100	0	Y	Y
B	T6 Flushing Liquor Storage Tank Water Draining (OOS)	A3	N	N	Y	B	Batch	1.33 gal / week	0	0.00	26.12	D	6.8 - 100	0	Y	Y
124-(118)	T7 Liquor Surge Tank Sampling	A3	N	N	Y	B	Batch	15 gal / day	1	5,475.00	158.01	D	8.4 - 590	0.003274491	Y	Y
125-(90)	T11 Liquor Surge Tank Sampling (#3Batt OOS)	A3	N	N	Y	B	Batch	15 gal / day	0	0.00	43.58	D	9 - 84	0	Y	Y
126A-(97)	T301 Flushing Tar Tank (D5/7 decanters) Sampling	B	N	N	Y	A	Batch	12 gal / day	1	4,380.00	112.89	D	17 - 450	0.002376736	Y	Y
B	T301 Flushing Tar Tank (D5/7 decanters) Water Draining	B	N	N	Y	B	Batch	calculated based on tar moistures	1	438441	112.89	D	17 - 450	0.238113226	NA	N
	T302A Flushing Tar Tank Sampling (OOS)	B	N	N	Y	B	Batch	10.67 gal / day	0	0.00	105.28	D	21.80 - 410	0	Y	Y
B	T302A Flushing Tar Tank Water Draining (OOS)	B	N	N	Y	B	Batch	calculated based on tar moistures	0	0	105.28	D	21.80 - 410	0	NA	N
128A-(115)	T302B Flushing Tar Tank Sampling (OOS)	B	N	N	Y	B	Batch	10.67 gal / day	0	0.00	105.28	D	21.80 - 410	0	Y	Y
B	T302B Flushing Tar Tank Water Draining (OOS)	B	N	N	Y	B	Batch	calculated based on tar moistures	0	0	105.28	D	21.80 - 410	0	NA	N
129A-(115)	T304A Tar Tank Sampling	B	N	N	Y	B	Batch	18 gal / day	1	6,570.00	105.28	D	21.80 - 410	0.0033275	Y	Y
B	T304A Tar Tank Water Draining	B	N	Y	NA	NA	NA	NA	NA	NA	105.28	D	21.80 - 410	NA	NA	N
130A-(94)	T304B Tar Tank Sampling	B	N	N	Y	B	Batch	18 gal / day	1	6,570.00	1,222.38	D	430 - 2600	0.038634521	Y	Y
B	T304B Tar Tank Water Draining	B	N	Y	NA	NA	NA	NA	NA	NA	1,222.38	D	430 - 2600	NA	NA	N
131A-(86)	T304C Flushing Tar Tank Sampling	B	N	N	Y	B	Batch	6 gal / day	1	2,190.00	168.33	D	3 - 710	0.001773404	Y	Y
B	T304C Flushing Tar Tank Water Draining	B	N	Y	NA	NA	NA	NA	NA	NA	168.33	D	3 - 710	NA	NA	N
132A-(86)	T306C Flushing Tar Tank Sampling	B	N	N	Y	B	Batch	6.4 gal / day	1	2,336.00	168.33	D	3 - 710	0.001891631	Y	Y
B	T306C Flushing Tar Tank Water Draining	B	N	Y	NA	NA	NA	NA	NA	NA	168.33	D	3 - 710	NA	NA	N
134A-(94)	T340A Primary Liquor Surge Tank Tar Draining	A3	N	N	Y	B	Batch	720 gal / 6 mos.	0	0.00	1,222.38	D	430 - 2600	0	Y	Y
134B-(94)	T340B Primary Liquor Surge Tank Tar Draining	A3	N	N	Y	B	Batch	720 gal / 6 mos.	0	0.00	1,222.38	D	430 - 2600	0	Y	Y
136	Dist. Sump Skimmer Tank Water Draining	B	N	N	Y	C	Batch	366.67 gal/yr	0	0.00	110.99	D	0.290 - 13.7	0	Y	Y
152A	V1A Demucker Wash Oil Sampling	H2	N	N	N	A	Batch	1.25 gal / week	1	65.00	6.00	D	0.20 - 3	0.00000188	Y	Y
B	V1B Demucker Water Draining	H2	N	N	N	A	Batch	1.25 gal / week	0	0.00	6.00	D	0.20 - 3	0	Y	Y
183	T7800 Distillation Sump Surge Tank Water Draining	A2	N	N	Y	C	Batch	NA	0	0.00	26.16	D	2.7 - 105.0	0	Y	Y
	Waste Water Treatment Plant (WWTP)															
160	T7000/7010 Oil/Tar Separator Light Oil Tap Sampling	E4	N	N	Y	C	Batch	15 gal/day	1	5,475.00	167.51	D	1.0 - 78	0.00347122	Y	Y
161	T7000/7010 Oil/Tar Separator Tar Tap Sampling	E1	N	N	Y	C	Batch	15 gal/day	1	5,475.00	456.27	D	2.5 - 6710	0.01201735	Y	Y
164	T7000/7010 Oil/Tar Separator Liquor Tap Sampling	A2	N	N	Y	C	Batch	15 gal/day	1	5,475.00	10.34	D	5 -18	0.00021433	Y	Y
160	T7020 Light Oil Tank Water Draining	E4	N	N	Y	C	Batch	NA	NA	NA	167.51	D	1.0 - 78	NA	Y	Y
161	T7030 Tar Tank Water Draining	E1	N	Y	NA	NA	NA	NA	NA	NA	456.27	D	2.5 - 6710	NA	NA	N
162	T7100/7110/7120 Liquor Storage Tank Water Draining	A2	N	Y	NA	NA	NA	NA	NA	NA	10.06	D	8.9 - 12	NA	NA	N
185	T7000 Oil/Tar Separator Tank Influent Sampling	A2	N	N	Y	C	Batch	2 gal/wk	1	730.00	9.74	D	2 -16	0.00002692	Y	Y
185	T7010 Oil/Tar Separator Tank Effluent Sampling	A2	N	N	Y	C	Batch	2 gal/wk	1	730.00	9.74	D	2 -16	0.00002692	Y	Y

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EPA-USS-0330946

Tank Sampling and Water Drains

Waste Stream I.D. #	Description of Waste Stream	Type of Waste Stream	Waste Stream Controlled for Benzene by Subpart FF	Waste Stream Hardpiped Between Two Subpart L Units	Water Content >10% (Y/N)	Determination Method: Water Content	Type of Discharge: (Cont./ Bat.)	Flow Rate Amount/Frequency	Unit in Service? or Any Draining? 1=Yes 0=No	Annual Waste Quantity (gal or Kg)	Annual Average Flow Weighted Benzene Concentration (ppm)	Determination Method: Benzene Concentration	Range of Benzene Concentration (ppm)	Annual Benzene Quantity (Mg)	Return to Process (Y/N)	Tab Component (Y/N)
										513,601.3			TAB	0.3244		

Reporting Year: 2006

NA - Not Applicable

ND - Not Determined

( ) - Indicates Higher Flow Weighted Benzene Conc. of two process streams present to calculate TAB

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Section 5
Sludge Sources

EPA-USS-0330948

Sludge Sources

Waste Stream I.D. #	Description of Waste Stream	Type of Waste Stream	Waste Stream Controlled for Benzene by Subpart FF	Waste Stream Hardpiped Between Two Subpart L Units	Water Content >10% (Y/N)	Determination Method: Water Content	Type of Discharge: (Cont./ Bat.)	Annual Waste Quantity (Kg)	Annual Average Flow Weighted Benzene Concentration (mg/Kg)	Determination Method: Benzene Concentration	Range of Benzene Concentration (mg/Kg)	Annual Benzene Quantity (Mg)	Return to Process (Y/N)	Tab Component (Y/N)
152C	Demucker Sludge	H2	N	N	N	A	Batch	30,853.83	6.00	D	0.20 - 3	0.00019	Y	Y
155	Flushing Tar Decanter Sludge D4, D5, D6, D7, D5/7N, D5/7S, D101A, D101B, D101C, D101D, D105A, D105B, D105C, D105D	H1	N	N	Y	A	Continuous	1,235,620.92	125.92	D	16 - 310	0.15559	Y	Y
156	Primary Tar Decanter Sludge L100B, L100C, L100D, L100E	H1	N	N	Y	C	Continuous		687.63	B	8.9 - 2200	0.00000	Y	Y
157	Process Water Storage Tank Clean Out Sludge T7100, T7110(T700), T7120(T701), T6	H3	N	N	Y	C	Batch		143.40	B	60 - 217	0.00000	Y	Y
158	Distillation Sump Clean Out	H3	N	N	Y	A	Batch		52.50	B	24 - 70	0.00000	Y	Y
165	#2Batt Flushing Tar Storage Tank Clean Out Sludge T2, T3	H3	N	N	Y	C	Batch			NA	NA	0.00000	Y	Y
166	#3Batt Flushing Tar Storage Tank Clean Out Sludge T301	H3	N	N	Y	C	Batch			NA	NA	0.00000	Y	Y
167	T302A #5/7Batt Flushing Tar Storage Tank Clean Out Sludge T302A, T302B	H3	N	N	Y	C	Batch			NA	NA	0.00000	Y	Y
168	#2/3Batt Flushing Tar Storage Tank Clean Out Sludge T304C, T306C	H3	N	N	Y	C	Batch		109.00	NA	NA	0.00000	Y	Y
169	Primary Cooler Tar Storage Tank Clean Out Sludge T304B, T345, T363A, T363D	H3	N	N	Y	A	Batch	157,480.92	109.00	D	109 - 109	0.01717	Y	Y
170	#2Batt Flushing Liquor Predecanter Clean Out Sludge D101A, D101B, D101C, D101D, D102A, D102B, D4, D5	H1	N	N	Y	A	Batch		41.37	D	19.1 - 78	0.00000	Y	Y
171	#3Batt Flushing Liquor Predecanter Clean Out Sludge D105A, D105B, D105C, D105D, D106A, D106B, D6, D7	H1	N	N	Y	A	Batch		19.58	D	2.5 - 70	0.00000	Y	Y
	Flushing Liquor Decanter Clean Out Sludge D5/7N, D5/7S	H1	N	N	Y	C	Batch		10.63	D	2 - 32	0.00000	Y	Y
173	Primary Decanter Clean Out Sludge L100B, L100C, L100D, L100E	H1	N	N	Y	C	Batch			NA	NA	0.00000	Y	Y
174	Dry Flushing Tar Storage Tank Clean Out Sludge T304A, T9	H3	N	N	Y	C	Batch			NA	NA	0.00000	Y	Y
175	#2Batt Flushing Liquor Surge Tank Clean Out Sludge T7	H3	N	N	Y	C	Batch			NA	NA	0.00000	Y	Y
176	#3Batt Flushing Liquor Surge Tank Clean Out Sludge T11	H3	N	N	Y	C	Batch			NA	NA	0.00000	Y	Y
177	Primary Liquor Surge Tank Clean Out Sludge T340A, T304B	H3	N	N	Y	C	Batch			NA	NA	0.00000	Y	Y
178	Light Oil Storage Tank Clean Out Sludge T311, T312	H3	N	N	Y	C	Batch			NA	NA	0.00000	Y	Y
179	Light Oil Recovery Process Vessel Clean Out Sludge	H3	N	N	Y	C	Batch			NA	NA	0.00000	Y	Y
180	Distillation Sump Skimmer Tank Clean Out Sludge	H3	N	N	Y	C	Batch			NA	NA	0.00000	Y	Y
181	Coke Plant Cleanup	H4	N	N	Y	C	Batch	27,868.56	336.42	B	37.5 - 1222.4	0.00938	Y	Y
181A	Coke Plant Cleanup (baker boxes and pitch bay)***	H4	N	N	Y	C	Batch	140,194.44	135.08	B	37.5 - 1222.5	0.01894	Y	Y
181A	Coke Plant Cleanup (offsite hauling)	H4	N	N	Y	C	Batch	295,724.07	135.08	B	37.5 - 1222.5	0.03995	Y	Y
182	Coke Oven Gas Line Clean Out Material	H3	N	N	Y	C	Batch	93.32	33.30	B	0.80 - 194	0.00000	Y	Y
184	WWTP Biosludge to on-site landfill	H4	N	N	Y	C	Batch	573,259.68	0.43	B	0.01 - 3	0.00025	Y	Y
186	Kopper's Tar Centrifuge Underflow	H1	N	N	Y	A	Batch		306.89	D	0.2 - 1270	0.00000	Y	Y
								2,461,095.73			TAB	0.24145		

Reporting Year: 2006

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Section 6
Mtce-Pump Drainage

EPA-USS-0330950

Maintenance-Pump Drainage

Waste Stream I.D. #	Description of Waste Stream	Type of Waste Stream	Waste Stream Controlled for Benzene by Subpart FF	Waste Stream Hardpiped Between Two Subpart L Units	Water Content >10% (Y/N)	Determination Method: Water Content	# of Occurrences of Pump Draining	Volume per Occurrence (gallons)	Annual Waste Quantity (gal)	Annual Average Flow Weighted Benzene Concentration (mg/l)	Determination Method: Benzene Concentration	Range of Benzene Concentration (mg/l)	Annual Benzene Quantity (Mg)	Return to Process (Y/N)	Tab Component (Y/N)
85	P101A Primary Cooler Tar Pump	F1	N	N	Y	A	2	9.8	19.6	1,088.67	D	459 - 3000	9.97446E-05	Y	Y
85	P101B Primary Cooler Tar Pump	F1	N	N	Y	A	2	11.3	22.6	1,088.67	D	459 - 3000	1.15012E-04	Y	Y
86	P102A Flushing Tar Pump	F1	N	N	Y	A	1	6.7	6.7	168.33	D	3 - 710	5.42553E-06	Y	Y
86	P102C Flushing Tar Pump	F1	N	N	Y	A	1	6.7	6.7	168.33	D	3 - 710	5.42553E-06	Y	Y
90	P111A Flushing Tar Pump	F1	N	N	Y	A	5	5.1	25.5	37.54	D	9 -71.4	4.60511E-06	Y	Y
90	P111B Flushing Tar Pump	F1	N	N	Y	A	5	6.2	31.0	37.54	D	9 -71.4	5.59837E-06	Y	Y
90	P111C Flushing Tar Pump	F2	N	N	Y	A	5	6.2	31.0	37.54	D	9 -71.4	5.59837E-06	Y	Y
94	P115 Primary Cooler Tar Pump	F1	N	N	Y	A	3	1.6	4.8	1,222.38	D	430 - 2600	2.82262E-05	Y	Y
99	P204A Flushing Tar Pump	F1	N	N	Y	A	2	7.6	15.2	828.64	D	110 - 1700	6.05920E-05	Y	Y
99	P204B Flushing Tar Pump	F1	N	N	Y	A	2	7.6	15.2	828.64	D	111 - 1700	6.05920E-05	Y	Y
99	P204C Flushing Tar Pump	F1	N	N	Y	A	2	4.4	8.8	828.64	D	112 - 1700	3.50796E-05	Y	Y
99	P207B Flushing Tar Pump	F1	N	N	Y	A	1	21.5	21.5	828.64	D	113 - 1700	8.57058E-05	Y	Y
	P207C Flushing Tar Pump	F1	N	N	Y	A	1	21.3	21.3	828.64	D	114 - 1700	8.49085E-05	Y	Y
101	P209A Flushing Tar Pump	F1	N	N	Y	A	12	8.1	97.2	51.56	D	19.2 - 110	2.41093E-05	Y	Y
101	P209B Flushing Tar Pump	F1	N	N	Y	A	12	8.1	97.2	51.56	D	19.2 - 110	2.41093E-05	Y	Y
100	P304A Flushing Tar Pump	F1	N	N	Y	A	6	3.1	18.6	87.14	D	3 - 520	7.79716E-06	Y	Y
100	P304B Flushing Tar Pump	F1	N	N	Y	A	6	3.1	18.6	87.14	D	3 - 520	7.79716E-06	Y	Y
97	PP118A Flushing Tar Pump	F1	N	N	Y	A	3	3.3	9.9	112.89	D	17 - 450	5.37646E-06	Y	Y
97	PP118B Flushing Tar Pump	F1	N	N	Y	A	3	3.3	9.9	112.89	D	17 - 450	5.37646E-06	Y	Y
97	PP118C Flushing Tar Pump	F2	N	N	Y	A	3	3.3	9.9	112.89	D	17 - 450	5.37646E-06	Y	Y
115	PP5/7E Flushing Tar Pump	F1	N	N	Y	A	2	4.9	9.8	105.28	D	21.80 - 410	4.96338E-06	Y	Y
115	PP5/7W Flushing tar Pump	F1	N	N	Y	A	2	4.9	9.8	105.28	D	21.80 - 410	4.96338E-06	Y	Y
118	PP7E Flushing Tar Pump	F1	N	N	Y	A	3	7.1	21.3	158.01	D	8.4 - 590	1.61909E-05	Y	Y
118	PP7F Flushing Tar Pump	F1	N	N	Y	A	3	9.2	27.6	158.01	D	8.4 - 590	2.09797E-05	Y	Y
81	P100A Primary Cooler Liquor Pump	F5	N	N	Y	B	1	182.8	182.8	45.98	D	26.3 - 63.1	3.18119E-05	Y	Y
81	P100B Primary Cooler Liquor Pump	F5	N	N	Y	B	1	188.9	188.9	45.98	D	26.3 - 63.1	3.28735E-05	Y	Y
81	P100C Primary Cooler Liquor Pump	F5	N	N	Y	B	1	184.5	184.5	45.98	D	26.3 - 63.1	3.21078E-05	Y	Y
81	P100D Primary Cooler Liquor Pump	F5	N	N	Y	B	0	N/A	0.0	45.98	D	26.3 - 63.1	0.00000E+00	Y	Y
81	P100E Primary Cooler Liquor Pump	F5	N	N	Y	B	1	166.2	166.2	45.98	D	26.3 - 63.1	2.89231E-05	Y	Y
81	P100F Primary Cooler Liquor Pump	F5	N	N	Y	B	1	191.5	191.5	45.98	D	26.3 - 63.1	3.33260E-05	Y	Y
83	P101A Flushing Liquor Pump	F5	N	N	Y	B	1	459	459.0	10.78	D	3.2 - 16	1.87196E-05	Y	Y
83	P101B Flushing Liquor Pump	F5	N	N	Y	B	1	673.2	673.2	10.78	D	3.2 - 16	2.74554E-05	Y	Y
87	P105A Liquor Bleedoff Pump	F5	N	N	Y	B	2	7.3	14.6	11.15	D	3.5 - 49.5	6.16229E-07	Y	Y
87	P105B Liquor Bleedoff Pump	F5	N	N	Y	B	2	7.3	14.6	11.15	D	3.5 - 49.5	6.16229E-07	Y	Y
88	P110A Flushing Liquor Pump	F5	N	N	Y	B	1	820.1	820.1	13.99	D	10 - 19	4.34226E-05	Y	Y
88	P110B Flushing Liquor Pump	F5	N	N	Y	B	1	967	967.0	13.99	D	10 - 19	5.12007E-05	Y	Y
91	P111A Final Cooler Liquor Pump	F5	N	N	Y	B	1	38.4	38.4	116.24	D	50 - 370	1.68952E-05	Y	Y
91	P111B Final Cooler Liquor Pump	F5	N	N	Y	B	1	23.5	23.5	116.24	D	50 - 370	1.03395E-05	Y	Y
91	P111C Final Cooler Liquor Pump	F5	N	N	Y	B	1	72.4	72.4	116.24	D	50 - 370	3.18545E-05	Y	Y
91	P111D Final Cooler Liquor Pump	F5	N	N	Y	B	1	109.5	109.5	116.24	D	50 - 370	4.81777E-05	Y	Y
92	P113A Rich Wash Oil Pump	F2	N	N	Y	B	0	7.3	0.0	7,720.55	D	10000 - 14300	0.00000E+00	Y	Y
92	P113B Rich Wash Oil Pump	F2	N	N	Y	B	0	90.3	0.0	7,720.55	D	10001 - 14300	0.00000E+00	Y	Y
92	P113C Rich Wash Oil Pump	F2	N	N	Y	B	1	123.8	123.8	7,720.55	D	10002 - 14300	3.61772E-03	Y	Y
92	P113D Rich Wash Oil Pump	F2	N	N	Y	B	1	126	126.0	7,720.55	D	10003 - 14300	3.68201E-03	Y	Y
93	P114A Liquor Bleedoff Pump	F5	N	N	Y	B	1	6.2	6.2	6.93	D	3 -15	1.62548E-07	Y	Y
93	P114B Liquor Bleedoff Pump	F5	N	N	Y	B	1	6.2	6.2	6.93	D	3 -15	1.62548E-07	Y	Y
95	P117A Flushing Liquor Pump	F5	N	N	Y	B	1	247.5	247.5	12.36	D	9.6 - 16	1.15760E-05	Y	Y
95	P117B Flushing Liquor Pump	F5	N	N	Y	B	1	247.5	247.5	12.36	D	9.6 - 16	1.15760E-05	Y	Y
98	P119A Napth Scrubber Liquor Pump	F5	N	N	Y	B	2	11.8	23.6	52.75	D	15 - 103	4.71165E-06	Y	Y
98	P119B Napth Scrubber Liquor Pump	F5	N	N	Y	B	2	6.4	12.8	52.75	D	15 - 103	2.55547E-06	Y	Y

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EPA-USS-0330951

Waste Stream I.D. #	Description of Waste Stream	Type of Waste Stream	Waste Stream Controlled for Benzene by Subpart FF	Waste Stream Hardpiped Between Two Subpart L Units	Water Content >10% (Y/N)	Determination Method: Water Content	# of Occurrences of Pump Draining	Volume per Occurrence (gallons)	Annual Waste Quantity (gal)	Annual Average Flow Weighted Benzene Concentration (mg/l)	Determination Method: Benzene Concentration	Range of Benzene Concentration (mg/l)	Annual Benzene Quantity (Mg)	Return to Process (Y/N)	Tab Component (Y/N)
98	P119D Napth Scrubber Liquor Pump	F5	N	N	Y	B	2	10.4	20.8	52.75	D	15 - 103	4.15264E-06	Y	Y
98	P119E Napth Scrubber Liquor Pump	F5	N	N	Y	B	2	10.4	20.8	52.75	D	15 - 103	4.15264E-06	Y	Y
102	P2D Flushing Liquor Pump	F5	N	N	Y	B	1	238	238.0	10.09	D	6.6 - 14	9.08837E-06	Y	Y
102	P2E Flushing Liquor Pump	F5	N	N	Y	B	1	238	238.0	10.09	D	6.6 - 14	9.08837E-06	Y	Y
104	P363A Tar Pump	F1	N	N	Y	A	1	4.5	4.5	453.54	D	16 - 1420	7.72495E-06	Y	Y
104	P363B Tar Pump	F1	N	N	Y	A	1	4.5	4.5	453.54	D	16 - 1420	7.72495E-06	Y	Y
104	P363C Tar Pump	F1	N	N	Y	A	1	4.5	4.5	453.54	D	16 - 1420	7.72495E-06	Y	Y
104	P363D Tar Pump	F1	N	N	Y	A	1	4.5	4.5	453.54	D	16 - 1420	7.72495E-06	Y	Y
105	P3A Flushing Tar Pump	F1	N	N	Y	A	5	5.4	27.0	127.62	D	20.3 - 450	1.30423E-05	Y	Y
105	P3C Flushing Tar Pump	F1	N	N	Y	A	5	5.4	27.0	127.62	D	20.3 - 450	1.30423E-05	Y	Y
112	P302A Light Oil Loading Pump	F4	N	N	Y	C	1	3.8	3.8	788,552.88	D	770931 - 952500	1.13418E-02	Y	Y
112	P302B Light Oil Loading Pump	F4	N	N	Y	C	0	3.8	0.0	788,552.88	D	770931 - 952500	0.00000E+00	Y	Y
107	P309 Light Oil Tank Water Return Pump	A4	N	N	Y	B	1	2.4	2.4	672.57	D	220 - 1260	6.10964E-06	Y	Y
153	P400C Tar Pump	F1	N	N	Y	A	13	14.7	191.1	70.88	D	2.40 - 250	5.12648E-05	Y	Y
153	P400D Tar Pump	F1	N	N	Y	A	13	14.7	191.1	70.88	D	2.40 - 250	5.12648E-05	Y	Y
107	P414A Light Oil Decanter Water Pump	A4	N	N	Y	C	2	1.9	3.8	672.57	D	220 - 1260	9.67359E-06	Y	Y
107	P414B Light Oil Decanter Water Pump	A4	N	N	Y	C	2	1.9	3.8	672.57	D	220 - 1260	9.67359E-06	Y	Y
110	P415A Lean Wash Oil Pump	F2	N	N	Y	C	3	78.8	236.4	609.33	D	218 -1600	5.45216E-04	Y	Y
110	P415B Lean Wash Oil Pump	F2	N	N	Y	C	3	78.8	236.4	609.33	D	218 -1600	5.45216E-04	Y	Y
110	P415C Lean Wash Oil Pump	F2	N	N	Y	C	3	78.8	236.4	609.33	D	218 -1600	5.45216E-04	Y	Y
111	P416A Knockout Drum Pump	F2	N	N	Y	C	1	1.9	1.9	12,300	D	5300 - 21000	8.84555E-05	Y	Y
111	P416B Knockout Drum Pump	F2	N	N	Y	C	0	1.9	0.0	12,300	D	5300 - 21000	0.00000E+00	Y	Y
112	P425A Light Oil Pump	F4	N	N	Y	C	1	2.1	2.1	788,552.88	D	770931 - 952500	6.26781E-03	Y	Y
112	P425B Light Oil Pump	F4	N	N	Y	C	0	2.1	0.0	788,552.88	D	770931 - 952500	0.00000E+00	Y	Y
153	P452A Tar Pump	F1	N	N	Y	A	5	7.6	38.0	70.88	D	2.40 - 250	1.01940E-05	Y	Y
153	P452B Tar Pump	F1	N	N	Y	A	5	7.6	38.0	70.88	D	2.40 - 250	1.01940E-05	Y	Y
113	P5/7E Flushing Liquor Pump	F5	N	N	Y	B	1	104.4	104.4	9.39	D	7.5 - 15	3.71006E-06	Y	Y
113	P5/7W Flushing Liquor Pump	F5	N	N	Y	B	1	104.4	104.4	9.39	D	7.5 - 15	3.71006E-06	Y	Y
116	P5A Liquor Storage Pump	F5	N	N	Y	B	0	10	0.0	14.76	D	6.9 - 24.9	N/A	N/A	Y
116	P5B Liquor Storage Pump	F5	N	N	Y	B	0	10	0.0	14.76	D	6.9 - 24.9	N/A	N/A	Y
117	P700M Liquor Storage Pump	F5	N	N	Y	B	0	9.1	0.0	8.60	D	2.4 - 22	N/A	N/A	Y
117	P700N Liquor Storage Pump	F5	N	N	Y	B	0	9.1	0.0	8.60	D	2.4 - 22	N/A	N/A	Y
117	P700S Liquor Storage Pump	F5	N	N	Y	B	0	3.9	0.0	8.60	D	2.4 - 22	N/A	N/A	Y
153	P9A Tar Pump	F1	N	N	Y	A	6	9.9	59.4	70.88	D	2.40 - 250	2.02528E-05	Y	Y
153	P9B Tar Pump	F1	N	N	Y	A	6	9.9	59.4	70.88	D	2.40 - 250	2.02528E-05	Y	Y
	Environmental Treatment Facility - Desulfurization Plant														
146	P1730 Rich Amine Pump	F3	N	N	Y	C	1	41.1	41.1	27.58	D	15 - 50	5.45209E-06	Y	Y
146	P1740 Rich Amine Pump	F3	N	N	Y	C	1	41.1	41.1	27.58	D	15 - 50	5.45209E-06	Y	Y
147	P1750 Lean Amine Pump	F3	N	N	Y	C	1	59.7	59.7	4.49	D	0.002 - 29	1.28984E-06	Y	Y
147	P1760 Lean Amine Pump	F3	N	N	Y	C	1	59.7	59.7	4.49	D	0.002 - 29	1.28984E-06	Y	Y
148	P1710 Amine Water Wash Pump	F8	N	N	Y	C	1	11.3	11.3	21.33	D	11 - 40	1.15969E-06	Y	Y
148	P1720 Amine Water Wash Pump	F8	N	N	Y	C	1	11.3	11.3	21.33	D	11 - 40	1.15969E-06	Y	Y
M	P1700 Coke Oven Gas Condensate Pump	A1	N	N	Y	C	1	1.6	1.6	20.32	D	6 - 35	1.56366E-07	Y	Y
149	P1790 Rich Reflux Pump	F9	N	N	Y	C	2	1.6	3.2	11.27	D	5 - 21	1.73441E-07	Y	Y
149	P1800 Rich Reflux Pump	F9	N	N	Y	C	2	1.6	3.2	11.27	D	5 - 21	1.73441E-07	Y	Y
150	P2510 Lean Reflux Pump	F9	N	N	Y	C	2	1.8	3.6	5.85	D	0.01 - 32	1.01321E-07	Y	Y
150	P2520 Lean Reflux Pump	F9	N	N	Y	C	2	1.8	3.6	5.85	D	0.01 - 32	1.01321E-07	Y	Y
151	P1770 Reclaimer Pump	I1	N	N	Y	C	2	2.0	4.0	0.45	D	0.001 - 9	8.74901E-09	Y	Y
151	P1780 Reclaimer Pump	I1	N	N	Y	C	2	2.0	4.0	0.45	D	0.001 - 9	8.74901E-09	Y	Y
	Environmental Treatment Facility - Waste Water Treatment Plant (WWTP)														

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EPA-USS-0330952

Maintenance-Pump Drainage

Waste Stream I.D. #	Description of Waste Stream	Type of Waste Stream	Waste Stream Controlled for Benzene by Subpart FF	Waste Stream Hardpiped Between Two Subpart L Units	Water Content >10% (Y/N)	Determination Method: Water Content	# of Occurrences of Pump Draining	Volume per Occurrence (gallons)	Annual Waste Quantity (gal)	Annual Average Flow Weighted Benzene Concentration (mg/l)	Determination Method: Benzene Concentration	Range of Benzene Concentration (mg/l)	Annual Benzene Quantity (Mg)	Return to Process (Y/N)	Tab Component (Y/N)
163A	P7200A Still Bottom Pumps	A6	N	N	Y	C	3	13.2	39.7	0.263	D	0 - 2	3.94750E-08	Y	Y
B	P7200B Still Bottom Pumps	A6	N	N	Y	C	3	13.2	39.7	0.263	D	0 - 2	3.94750E-08	Y	Y
C	P7200C Still Bottom Pumps	A6	N	N	Y	C	0	13.2	0.0	0.263	D	0 - 2	0.00000E+00	Y	Y
162A	P7110A Still Feed Pumps	A2	N	N	Y	C	1	13.2	13.2	10.08	D	8.9 - 12	5.04450E-07	Y	Y
B	P7110B Still Feed Pumps	A2	N	N	Y	C	1	13.2	13.2	10.08	D	8.9 - 12	5.04450E-07	Y	Y
C	P7110C Still Feed Pumps	A2	N	N	Y	C	1	13.2	13.2	10.08	D	8.9 - 12	5.04450E-07	Y	Y
164A	P7000A Oil/Tar Separation Effluent Pumps	A2	N	N	Y	C	1	13.2	13.2	10.34	D	5 -18	5.17419E-07	Y	Y
B	P7000B Oil/Tar Separation Effluent Pumps	A2	N	N	Y	C	1	13.2	13.2	10.34	D	5 -18	5.17419E-07	Y	Y
C	P7000C Oil/Tar Separation Effluent Pumps	A2	N	N	Y	C	1	13.2	13.2	10.34	D	5 -18	5.17419E-07	Y	Y
160A	P7020A Light Oil Pump	F4	N	N	Y	C	3	3.3	9.8	167.51	D	1 - 78	6.20734E-06	Y	Y
B	P7020B Light Oil Pump	F4	N	N	Y	C	3	3.3	9.8	167.51	D	1 - 78	6.20734E-06	Y	Y
161A	P7030A Tar Pump	F1	N	N	Y	C	3	11.7	35.2	456.27	D	2.5 - 6710	7.73632E-05	Y	Y
B	P7030B Tar Pump	F1	N	N	Y	C	3	11.7	35.2	456.27	D	2.5 - 6710	7.73632E-05	Y	Y
C	P7030C Tar Pump	F1	N	N	Y	C	1	11.7	11.7	456.27	D	2.5 - 6710	2.57877E-05	Y	Y
162A	P7100A Flushing Liquor Transfer Pump	F5	N	N	Y	C	1	1.0	1.0	10.08	D	8.9 - 12	3.73667E-08	Y	Y
B	P7100B Flushing Liquor Transfer Pump	F5	N	N	Y	C	1	1.0	1.0	10.08	D	8.9 - 12	3.73667E-08	Y	Y
									7512.0			TAB	0.028288		

Reporting Year: 2006

NA - Not Applicable

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EPA-USS-0330953

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Section 7

Mtce-Exchanger and Piping Drainage

EPA-USS-0330954

Reference Waste Stream I.D. #	Description of Waste Stream	Type of Waste Stream	Waste Stream Controlled for Benzene by Subpart FF	Waste Stream Hardpiped Between Two Subpart L Units	Water Content >10% (Y/N)	Determination Method: Water Content	# of Occurrences of Draining	Volume per Occurrence (gallons)	Annual Waste Quantity (gal)	Annual Average Flow Weighted Benzene Concentration (mg/l)	Determination Method: Benzene Concentration	Range of Benzene Concentration (mg/l)	Annual Benzene Quantity (Mg)	Return to Process (Y/N)	Tab Component (Y/N)
81	E100-2 Primary Cooler Liquor Plate/Frame Exchanger	F5	N	N	Y	B	0	456	0	45.98	D	26.3 - 63.1	0.00000E+00	Y	Y
81	E100-3 Primary Cooler Liquor Plate/Frame Exchanger	F5	N	N	Y	B	1	362	362	45.98	D	26.3 - 63.1	6.29974E-05	Y	Y
81	E100-4 Primary Cooler Liquor Plate/Frame Exchanger	F5	N	N	Y	B	1	362	362	45.98	D	26.3 - 63.1	6.29974E-05	Y	Y
81	E100-5 Primary Cooler Liquor Plate/Frame Exchanger	F5	N	N	Y	B	1	362	362.0	45.98	D	26.3 - 63.1	6.29974E-05	Y	Y
81	E100-6 Primary Cooler Liquor Plate/Frame Exchanger	F5	N	N	Y	B	0	362	0	45.98	D	26.3 - 63.1	0.00000E+00	Y	Y
81	E100-7 Primary Cooler Liquor Plate/Frame Exchanger	F5	N	N	Y	B	1	362	362	45.98	D	26.3 - 63.1	6.29974E-05	Y	Y
81	E100-8 Primary Cooler Liquor Plate/Frame Exchanger	F5	N	N	Y	B	0	362	0	45.98	D	26.3 - 63.1	0.00000E+00	Y	Y
91	E111E Final Cooler Liquor Plate/Frame Exchanger	F5	N	N	Y	B	2	106	212	116.24	D	50 - 370	9.32756E-05	Y	Y
91	E111M Final Cooler Liquor Plate/Frame Exchanger	F5	N	N	Y	B	2	106	212.0	116.24	D	50 - 370	9.32756E-05	Y	Y
91	E111W Final Cooler Liquor Plate/Frame Exchanger	F5	N	N	Y	B	3	106	318.0	116.24	D	50 - 370	1.39913E-04	Y	Y
83	E304B Tar Heater	F1	N	N	Y	A	1	423	423	10.78	D	3.2 - 16	2.13056E-05	Y	Y
83	E304C Tar Heater	F1	N	N	Y	A	0	423	0	10.78	D	3.2 - 16	0.00000E+00	Y	Y
	E401 Rich Oil/Vapor Heat Exchanger	D	N	N	Y	B	0	447	0	7,720.55	D	10000 - 14300	0.00000E+00	Y	Y
(99)-153	E403 Wet Tar/Dry Tar Heat Exchanger	F1	N	N	N	A	0	734	0	795.77	D	110 - 1700	0.00000E+00	Y	Y
92	E413A Rich Wash Oil Exchanger	D	N	N	Y	B	0	683	0	7,720.55	D	10000 - 14300	0.00000E+00	Y	Y
92	E413B Rich Wash Oil Exchanger	D	N	N	Y	B	0	683	0	7,720.55	D	10000 - 14300	0.00000E+00	Y	Y
(92)-110	E414A Rich/Lean Wash Oil Exchanger	D	N	N	Y	B	0	1865	0	7,720.55	D	10000 - 14300	0.00000E+00	Y	Y
(92)-110	E414B Rich/Lean Wash Oil Exchanger	D	N	N	Y	B	0	1865	0	7,720.55	D	10000 - 14300	0.00000E+00	Y	Y
(92)-110	E414B Rich/Lean Wash Oil Exchanger	F2	N	N	Y	B	0	1865	0	7,720.55	D	10000 - 14300	0.00000E+00	Y	Y
(92)-110	E415A Rich/Lean Wash Oil Exchanger	D	N	N	Y	B	0	1681	0	7,720.55	D	10000 - 14300	0.00000E+00	Y	Y
(92)-110	E415B Rich/Lean Wash Oil Exchanger	D	N	N	Y	B	0	1681	0	7,720.55	D	10000 - 14300	0.00000E+00	Y	Y
(92)-110	E415B Rich/Lean Wash Oil Exchanger	F2	N	N	Y	B	0	1681	0	7,720.55	D	10000 - 14300	0.00000E+00	Y	Y
92	Rich/Lean Wash Oil Piping	D	N	N	Y	B	0	5221	0	7,720.55	D	10000 - 14300	0.00000E+00	Y	Y
110	E416A Lean Wash Oil Exchanger	D	N	N	Y	C	0	1023	0	609.33	D	218 -1600	0.00000E+00	Y	Y
110	E416B Lean Wash Oil Exchanger	D	N	N	Y	C	0	1023	0	609.33	D	218 -1600	0.00000E+00	Y	Y
110	E416C Lean Wash Oil Exchanger	D	N	N	Y	C	0	1023	0	609.33	D	218 -1600	0.00000E+00	Y	Y
110	E416D Lean Wash Oil Exchanger	D	N	N	Y	C	0	1023	0	609.33	D	218 -1600	0.00000E+00	Y	Y
92	E422 Rich Wash Oil Exchanger	D	N	N	Y	B	0	895	0	7,720.55	D	10000 - 14300	0.00000E+00	Y	Y
92	E453A Rich Wash Oil Heater	D	N	N	Y	B	0	474	0.0	7,720.55	D	10000 - 14300	0.00000E+00	Y	Y
92	E453B Rich Wash Oil Heater	D	N	N	Y	B	0	474	0	7,720.55	D	10000 - 14300	0.00000E+00	Y	Y
153	E9 Tar Heater/Cooler	F1	N	N	N	A	1	423	423	70.88	D	2.40 - 250	1.44225E-04	Y	Y
	Environmental Treatment Facility - Desulfurization Plant														
147	E1570 Lean Amine Solution Cooler	F3	N	N	Y	C	1	1766	1766	4.49	D	0.002 - 29	3.00201E-05	Y	Y
(146)-147	E1500 Rich/Lean Amine Solution Exchanger	F3	N	N	Y	C	1	1234	1234	27.58	D	15 - 50	1.28794E-04	Y	Y
(146)-147	E1510 Rich/Lean Amine Solution Exchanger	F3	N	N	Y	C	1	1234	1234	27.58	D	15 - 50	1.28794E-04	Y	Y
(146)-147	E1520 Rich/Lean Amine Solution Exchanger	F3	N	N	Y	C	1	1234	1234	27.58	D	15 - 50	1.28794E-04	Y	Y
									8504.0			TAB	0.001160		

Reporting Year: 2006

( ) - Indicates Higher Flow Weighted Benzene Conc. of two process streams present to calculate TAB

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Section 8

Mtce-Instrumentation/ Control Valves/PVS's

EPA-USS-0330956

Reference Waste Stream I.D. #	Description of Waste Stream	Type of Waste Stream	Waste Stream Controlled for Benzene by Subpart FF	Waste Stream Hardpiped Between Two Subpart L Units	Water Content >10% (Y/N)	Determination Method: Water Content	Type of Discharge: (Cont./ Bat.)	Flow Rate or Volume Per Occurrence	Annual Waste Quantity (gal)	Annual Average Flow Weighted Benzene Concentration (mg/l)	Determination Method: Benzene Concentration	Range of Benzene Concentration (mg/l)	Annual Benzene Quantity (Mg)	Return to Process (Y/N)	Tab Component (Y/N)
	#1 Pumphouse														
81	FCV-900 D4/D5 Liq. M/U Flow Sys. P.S.	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
116	FT -T6A T6A Liquor flow to quench system	F5	N	N	Y	B	Batch	3 gal / year	0	14.76	NA	6.9 - 24.9	0.00000E+00	Y	Y
102	FT-322 P.S. Liquor Flow Transmitter	F5	N	N	Y	B	Batch	3 gal / year	3	10.09	D	6.6 - 14	1.14559E-07	Y	Y
81	FT-401 Liquor Makeup Flow Transmitter	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
118	FT 421/521 Tar flow system pusher side	F1	N	N	Y	B	Batch	3 gal / year	3	158.01	D	8.4 - 590	2.28045E-06	Y	Y
102	FT-422 Liquor Bleedoff Flow Transmitter	F5	N	N	Y	B	Batch	3 gal / year	3	10.09	D	6.6 - 14	1.14559E-07	Y	Y
116	FT-T6A Flow To Quench Transmitter	F5	N	N	Y	B	Batch	3 gal / year	0	14.76	NA	6.9 - 24.9	0.00000E+00	Y	Y
81	FT-900 D4/D5 Liq. M/U Flow System P. S.	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
81	FT-902 D4/D5 Liq. M/U Flow System P. S.	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
102	FT-905 Liquor Blowdown Flow System P. S.	F5	N	N	Y	B	Batch	3 gal / year	3	10.09	D	6.6 - 14	1.14559E-07	Y	Y
102	LCV -904A D4 Liquor Level/Blowdown system	F5	N	N	Y	B	Batch	3 gal / year	3	10.09	D	6.6 - 14	1.14559E-07	Y	Y
	LCV-907 T7 Liquor Level /Emergency M/U System	F5	N	N	Y	B	Batch	3 gal / year	3	10.09	D	6.6 - 14	1.14559E-07	Y	Y
118	LCV-911 D4 Tar/Liq. Interface Level System	F1	N	N	Y	B	Batch	3 gal / year	3	158.01	D	8.4 - 590	2.28045E-06	Y	Y
118	LCV-912 D5 Tar/Liq. Interface Level System	F1	N	N	Y	B	Batch	3 gal / year	3	158.01	D	8.4 - 590	2.28045E-06	Y	Y
105	LT-T2 Flushing Tar Storage	F1	N	N	Y	A	Batch	3 gal / year	3	127.62	D	20.3 - 450	1.84183E-06	Y	Y
105	LT-T3 Flushing Tar Storage	F1	N	N	Y	A	Batch	3 gal / year	3	127.62	D	20.3 - 450	1.84183E-06	Y	Y
116	LT-T6 Liquor Storage	F5	N	N	Y	B	Batch	3 gal / year	3	14.76	NA	6.9 - 24.9	1.67600E-07	Y	Y
118	LT-421 D4 Flushing Liquor Decanter Tar Level	F1	N	N	Y	B	Batch	3 gal / year	3	158.01	D	8.4 - 590	2.28045E-06	Y	Y
102	LT-422 T7 Flushing Liquor Surge Tank	F5	N	N	Y	B	Batch	3 gal / year	3	10.09	D	6.6 - 14	1.14559E-07	Y	Y
118	LT-521 D-5 Flushing Liquor Decanter Tar Level	F1	N	N	Y	B	Batch	3 gal / year	3	158.01	D	8.4 - 590	2.28045E-06	Y	Y
102	LT -904A D5 Liquor Level/Blowdown system	F5	N	N	Y	B	Batch	3 gal / year	3	10.09	D	6.6 - 14	1.14559E-07	Y	Y
102	LT -904B D4 Liquor Level/Blowdown system	F5	N	N	Y	B	Batch	3 gal / year	3	10.09	D	6.6 - 14	1.14559E-07	Y	Y
102	LT-907 T7 Liquor Level /Emergency M/U System	F5	N	N	Y	B	Batch	3 gal / year	3	10.09	D	6.6 - 14	1.14559E-07	Y	Y
118	LT-911 D4 Tar/Liq. Interface Level System	F1	N	N	Y	B	Batch	3 gal / year	3	158.01	D	8.4 - 590	2.28045E-06	Y	Y
118	LT-912 D5 Tar/Liq. Interface Level System	F1	N	N	Y	B	Batch	3 gal / year	3	158.01	D	8.4 - 590	2.28045E-06	Y	Y
102	PS-P2E Flushing Liquor Pressure Switch	F5	N	N	Y	B	Batch	3 gal / year	3	10.09	D	6.6 - 14	1.14559E-07	Y	Y
102	PS-P2E Flushing Liquor Steam Turbine	F5	N	N	Y	B	Batch	3 gal / year	3	10.09	D	6.6 - 14	1.14559E-07	Y	Y
118	PT P7E P7E Tar pump pressure system	F1	N	N	Y	B	Batch	3 gal / year	3	158.01	D	8.4 - 590	2.28045E-06	Y	Y
118	PT P7F P7F Tar pump pressure system	F1	N	N	Y	B	Batch	3 gal / year	3	158.01	D	8.4 - 590	2.28045E-06	Y	Y
102	PT-322 Flushing Liquor Pressure Transmitter	F5	N	N	Y	B	Batch	3 gal / year	3	10.09	D	6.6 - 14	1.14559E-07	Y	Y
102	PT-423 Flushing Liquor Bleedoff	F5	N	N	Y	B	Batch	3 gal / year	3	10.09	D	6.6 - 14	1.14559E-07	Y	Y
81	PT-901 Liquor M/U Pressure system	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
102	PT-906 Liquor Blowdown Flow System P. S.	F5	N	N	Y	B	Batch	3 gal / year	3	10.09	D	6.6 - 14	1.14559E-07	Y	Y
102	PT-908 Emergency M/U Pressure System P. S.	F5	N	N	Y	B	Batch	3 gal / year	3	10.09	D	6.6 - 14	1.14559E-07	Y	Y
102	PT-910 P.S> Flushing liquor Pressure System	F5	N	N	Y	B	Batch	3 gal / year	3	10.09	D	6.6 - 14	1.14559E-07	Y	Y
	#2 Pumphouse														
81	FCV-921 Flushing Liquor M/U Flow System	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
86	FT-103/104 Tar Flow system	F1	N	N	Y	A	Batch	3 gal / year	3	168.33	D	3 - 710	2.42932E-06	Y	Y
83	FT-126 Liquor Bleedoff Flow	F5	N	N	Y	B	Batch	3 gal / year	3	10.78	D	3.2 - 16	1.22350E-07	Y	Y
81	FT-131 Liquor Makeup Flow	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
83	FT-321 C.S. Flushing Liquor	F5	N	N	Y	B	Batch	3 gal / year	3	10.78	D	3.2 - 16	1.22350E-07	Y	Y
81	FT 921 C.S. Flushing Liquor M/U Flow system	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
83	FT-926 Liq. B/D Flow System Coke Side	F5	N	N	Y	B	Batch	3 gal / year	3	10.78	D	3.2 - 16	1.22350E-07	Y	Y
83	LCV 925 B-101 Liquor B/D Level system C.S.	F5	N	N	Y	B	Batch	3 gal / year	3	10.78	D	3.2 - 16	1.22350E-07	Y	Y
83	LCV 928 Emergency Liquor M/U system C.S.	F5	N	N	Y	B	Batch	3 gal / year	3	10.78	D	3.2 - 16	1.22350E-07	Y	Y
83	LT-121 D1O2A Flushing Liquor Decanter	F5	N	N	Y	B	Batch	3 gal / year	3	10.78	D	3.2 - 16	1.22350E-07	Y	Y
83	LT-122 D102B Flushing Liquor Decanter	F5	N	N	Y	B	Batch	3 gal / year	3	10.78	D	3.2 - 16	1.22350E-07	Y	Y
87	LT-127 B-101: Flushing Liquor Bottom of Tank	F5	N	N	Y	B	Batch	3 gal / year	3	11.15	D	3.5 - 49.5	1.26622E-07	Y	Y
83	LT 925 B-101 Liquor B/D level system C.S.	F5	N	N	Y	B	Batch	3 gal / year	3	10.78	D	3.2 - 16	1.22350E-07	Y	Y
83	LT-928A D102A Liquor Level/Emergency M/U system	F5	N	N	Y	B	Batch	3 gal / year	3	10.78	D	3.2 - 16	1.22350E-07	Y	Y
83	LT-928B D102A Liquor Level/Emergency M/U system	F5	N	N	Y	B	Batch	3 gal / year	3	10.78	D	3.2 - 16	1.22350E-07	Y	Y
83	PS-P101B C.S. Flushing Liquor	F5	N	N	Y	B	Batch	3 gal / year	3	10.78	D	3.2 - 16	1.22350E-07	Y	Y
83	PS-P101B C.S. Flushing Liquor Steam Turbine System	F5	N	N	Y	B	Batch	3 gal / year	3	10.78	D	3.2 - 16	1.22350E-07	Y	Y
86	PT- P102A P102A Tar Pump Pressure System	F1	N	N	Y	A	Batch	3 gal / year	3	168.33	D	3 - 710	2.42932E-06	Y	Y

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Reference Waste Stream I.D. #	Description of Waste Stream	Type of Waste Stream	Waste Stream Controlled for Benzene by Subpart FF	Waste Stream Hardpiped Between Two Subpart L Units	Water Content >10% (Y/N)	Determination Method: Water Content	Type of Discharge: (Cont./ Bat.)	Flow Rate or Volume Per Occurrence	Annual Waste Quantity (gal)	Annual Average Flow Weighted Benzene Concentration (mg/l)	Determination Method: Benzene Concentration	Range of Benzene Concentration (mg/l)	Annual Benzene Quantity (Mg)	Return to Process (Y/N)	Tab Component (Y/N)
86	PT- P102C P102C Tar Pump Pressure System	F1	N	N	Y	A	Batch	3 gal / year	3	168.33	D	3 - 710	2.42932E-06	Y	Y
83	PT-321 C.S. Flushing Liquor	F5	N	N	Y	B	Batch	3 gal / year	3	10.78	D	3.2 - 16	1.22350E-07	Y	Y
81	PT-922 Liquor M/U Pressure System Coke side	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
83	PT-927 Liq. B/D Flow System Coke Side	F5	N	N	Y	B	Batch	3 gal / year	3	10.78	D	3.2 - 16	1.22350E-07	Y	Y
83	PT-931 C.S. Flushing Liquor Pressure System	F5	N	N	Y	B	Batch	3 gal / year	3	10.78	D	3.2 - 16	1.22350E-07	Y	Y
	#3 Pumphouse														
81	FCV-981 P.S Flushing Liquor M/U Flow system	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
95	FT-126 C.S. Liquor Bleedoff Flow	F5	N	N	Y	B	Batch	3 gal / year	3	12.36	D	9.6 - 16	1.40315E-07	Y	Y
81	FT-131 C.S. Flushing Liquor Makeup Flow	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
88	FT-321 P.S. Flushing Liquor Flow	F5	N	N	Y	B	Batch	3 gal / year	3	13.99	D	10 - 19	1.58844E-07	Y	Y
88	FT-322 P.S. Flushing Liquor Flow	F5	N	N	Y	B	Batch	3 gal / year	3	13.99	D	10 - 19	1.58844E-07	Y	Y
81	FT-401 Flushing Liquor Makeup Flow	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
95	FT-422 Liquor Bleedoff Coke (Gary) Side	F5	N	N	Y	B	Batch	3 gal / year	3	12.36	D	9.6 - 16	1.40315E-07	Y	Y
81	FT-961 D6/D7 Liquor M/U Flow system C.S.	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
95	FT-966 Liquor Blowdown Flow System C.S.	F5	N	N	Y	B	Batch	3 gal / year	3	12.36	D	9.6 - 16	1.40315E-07	Y	Y
95	FT-970 C.S. Flushing Liquor Flow System	F5	N	N	Y	B	Batch	3 gal / year	3	12.36	D	9.6 - 16	1.40315E-07	Y	Y
88	FT-981 P.S Flushing Liq. Steam Turbine	F5	N	N	Y	B	Batch	3 gal / year	3	13.99	D	10 - 19	1.58844E-07	Y	Y
88	FT-986 Liquor B/D Flow Pusher Side	F5	N	N	Y	B	Batch	3 gal / year	3	13.99	D	10 - 19	1.58844E-07	Y	Y
88	FT-990 P.S. Flushing Liquor Flow System	F5	N	N	Y	B	Batch	3 gal / year	3	13.99	D	10 - 19	1.58844E-07	Y	Y
81	LCV-961 D6/D7 Liquor M/U Flow system C.S	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
95	LCV-965 Liquor Blowdown System Coke Side	F5	N	N	Y	B	Batch	3 gal / year	3	12.36	D	9.6 - 16	1.40315E-07	Y	Y
95	LCV-968 T11 Liquor Level/Emergency M.U. system	F5	N	N	Y	B	Batch	3 gal / year	3	12.36	D	9.6 - 16	1.40315E-07	Y	Y
97	LCV-972 D6 Tar/Liquor Interface Level system	F1	N	N	Y	A	Batch	3 gal / year	3	112.89	D	17 - 450	1.62927E-06	Y	Y
97	LCV-972/973 D6 Tar/Liquor Interface Level system	F1	N	N	Y	A	Batch	3 gal / year	3	112.89	D	17 - 450	1.62927E-06	Y	Y
88	LCV 985 B104 Liquor B/D Level system P.S.	F5	N	N	Y	B	Batch	3 gal / year	3	13.99	D	10 - 19	1.58844E-07	Y	Y
88	LCV 988 Emergency Liquor M/U system P.S.	F5	N	N	Y	B	Batch	3 gal / year	3	13.99	D	10 - 19	1.58844E-07	Y	Y
95	LT-D106A Flushing Liquor Decanter Liquor	F5	N	N	Y	B	Batch	3 gal / year	3	12.36	D	9.6 - 16	1.40315E-07	Y	Y
95	LT-D106B Flushing Liquor Decanter Liquor	F5	N	N	Y	B	Batch	3 gal / year	3	12.36	D	9.6 - 16	1.40315E-07	Y	Y
97	LT-421 D6 Flushing Liquor Decanter Tar Level	F1	N	N	Y	A	Batch	3 gal / year	3	112.89	D	17 - 450	1.62927E-06	Y	Y
95	LT-422A T11 Flushing Liquor Surge Tank	F5	N	N	Y	B	Batch	3 gal / year	3	12.36	D	9.6 - 16	1.40315E-07	Y	Y
95	LT-422B T11 Flushing Liquor Surge Tank	F5	N	N	Y	B	Batch	3 gal / year	3	12.36	D	9.6 - 16	1.40315E-07	Y	Y
97	LT-521 D7 Flushing Liquor Decanter Tar Level	F1	N	N	Y	A	Batch	3 gal / year	3	112.89	D	17 - 450	1.62927E-06	Y	Y
95	LT-965A D6 Liquor Level /Blowdown System	F5	N	N	Y	B	Batch	3 gal / year	3	12.36	D	9.6 - 16	1.40315E-07	Y	Y
95	LT-965B D7 Liquor Level /Blowdown System	F5	N	N	Y	B	Batch	3 gal / year	3	12.36	D	9.6 - 16	1.40315E-07	Y	Y
95	LT-968 T11 Liquor Level/Emergency M.U. system	F5	N	N	Y	B	Batch	3 gal / year	3	12.36	D	9.6 - 16	1.40315E-07	Y	Y
97	LT 972 D6 Tar/Liq interface Level system	F1	N	N	Y	A	Batch	3 gal / year	3	112.89	D	17 - 450	1.62927E-06	Y	Y
97	LT 973 D7 Tar/Liq interface Level system	F1	N	N	Y	A	Batch	3 gal / year	3	112.89	D	17 - 450	1.62927E-06	Y	Y
88	LT-985 B104 Liquor B/D Level system P.S.	F5	N	N	Y	B	Batch	3 gal / year	3	13.99	D	10 - 19	1.58844E-07	Y	Y
88	LT-988A D106A Liquor Level/Emergency M/U system	F5	N	N	Y	B	Batch	3 gal / year	3	13.99	D	10 - 19	1.58844E-07	Y	Y
88	PS-110B P.S Flushing Liq. Steam Turbine	F5	N	N	Y	B	Batch	3 gal / year	3	13.99	D	10 - 19	1.58844E-07	Y	Y
95	PS-117B C.S Flushing Liq. Steam Turbine	F5	N	N	Y	B	Batch	3 gal / year	3	12.36	D	9.6 - 16	1.40315E-07	Y	Y
88	PT-321 P.S. Flushing Liquor	F5	N	N	Y	B	Batch	3 gal / year	3	13.99	D	10 - 19	1.58844E-07	Y	Y
95	PT-322 C.S. Flushing Liquor	F5	N	N	Y	B	Batch	3 gal / year	3	12.36	D	9.6 - 16	1.40315E-07	Y	Y
93	PT-423 Flushing Liquor Bleedoff	F5	N	N	Y	B	Batch	3 gal / year	3	6.93	D	3 -15	7.86523E-08	Y	Y
81	PT-962 Liquor M/U Pressure System Coke side	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
95	PT-967 Liquor Blowdown Flow System	F5	N	N	Y	B	Batch	3 gal / year	3	12.36	D	9.6 - 16	1.40315E-07	Y	Y
95	PT-969 Emergency M/U Pressure System C. S.	F5	N	N	Y	B	Batch	3 gal / year	3	12.36	D	9.6 - 16	1.40315E-07	Y	Y
95	PT-971 C.S Flushing Liq. Steam Turbine	F5	N	N	Y	B	Batch	3 gal / year	3	12.36	D	9.6 - 16	1.40315E-07	Y	Y
88	PT-982 Liquor M/U Pressure System P.S.	F5	N	N	Y	B	Batch	3 gal / year	3	13.99	D	10 - 19	1.58844E-07	Y	Y
88	PT-987 Liquor Blowdown Pressure system P.S.	F5	N	N	Y	B	Batch	3 gal / year	3	13.99	D	10 - 19	1.58844E-07	Y	Y
81	PT-989 Emergency Liquor M/U Pressure P.S.	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
	5/7 Pumphouse														
113	FCV- 946 D-5/7 Liquor Blowdown System	F5	N	N	Y	B	Batch	3 gal / year	3	9.39	D	7.5 - 15	1.06611E-07	Y	Y
113	FT-422 Liquor Bleedoff	F5	N	N	Y	B	Batch	3 gal / year	3	9.39	D	7.5 - 15	1.06611E-07	Y	Y
81	FT-942 Liquor Makeup flow system	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y

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Reference Waste Stream I.D. #	Description of Waste Stream	Type of Waste Stream	Waste Stream Controlled for Benzene by Subpart FF	Waste Stream Hardpiped Between Two Subpart L Units	Water Content >10% (Y/N)	Determination Method: Water Content	Type of Discharge: (Cont./ Bat.)	Flow Rate or Volume Per Occurrence	Annual Waste Quantity (gal)	Annual Average Flow Weighted Benzene Concentration (mg/l)	Determination Method: Benzene Concentration	Range of Benzene Concentration (mg/l)	Annual Benzene Quantity (Mg)	Return to Process (Y/N)	Tab Component (Y/N)
113	FT-947 Liquor Blowdown flow System	F5	N	N	Y	B	Batch	3 gal / year	3	9.39	D	7.5 - 15	1.06611E-07	Y	Y
115	LCV-941 D-5 & 7 Liquor Level System	F1	N	N	Y	A	Batch	3 gal / year	3	105.28	D	21.80 - 410	1.51940E-06	Y	Y
113	LCV-949 Liquor Level /Emergency M/U system	F5	N	N	Y	B	Batch	3 gal / year	3	9.39	D	7.5 - 15	1.06611E-07	Y	Y
115	LT-421 D-5&7N Flushing Liquor Decanter Tar Level	F1	N	N	Y	A	Batch	3 gal / year	3	105.28	D	21.80 - 410	1.51940E-06	Y	Y
113	LT-422 D-5 & 7 Flushing Liquor Decanter Liquor	F5	N	N	Y	B	Batch	3 gal / year	3	9.39	D	7.5 - 15	1.06611E-07	Y	Y
115	LT-521 D-5&7S Flushing Liquor Decanter Tar Level	F1	N	N	Y	A	Batch	3 gal / year	3	105.28	D	21.80 - 410	1.51940E-06	Y	Y
113	LT- 946A D-5 & 7 Liquor Level/Blowdown System	F5	N	N	Y	B	Batch	3 gal / year	3	9.39	D	7.5 - 15	1.06611E-07	Y	Y
113	LT- 946B D-5 & 7 Liquor Level/Blowdown System	F5	N	N	Y	B	Batch	3 gal / year	3	9.39	D	7.5 - 15	1.06611E-07	Y	Y
113	LT- 949A Liquor Level/Emergency M/U System	F5	N	N	Y	B	Batch	3 gal / year	3	9.39	D	7.5 - 15	1.06611E-07	Y	Y
113	LT- 949B Liquor Level/Emergency M/U System	F5	N	N	Y	B	Batch	3 gal / year	3	9.39	D	7.5 - 15	1.06611E-07	Y	Y
115	LT- 949A D-5 & 7 Liquor Level System	F1	N	N	Y	A	Batch	3 gal / year	3	105.28	D	21.80 - 410	1.51940E-06	Y	Y
115	LT- 949B D-5 & 7 Liquor Level System	F1	N	N	Y	A	Batch	3 gal / year	3	105.28	D	21.80 - 410	1.51940E-06	Y	Y
113	PT-948 Liquor Blowdown Pressure System	F5	N	N	Y	B	Batch	3 gal / year	3	9.39	D	7.5 - 15	1.06611E-07	Y	Y
81	PT-950 Emergency Liquor M/U Pressure System	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
	Primary Pumphouse														
94	FCA-106A A. Primary Cooler Tar Flow system	F1	N	N	Y	A	Batch	3 gal / year	3	1,222.38	D	430 - 2600	1.69756E-05	Y	Y
81	FCV-112A A Primary Clr. Gas Outlet Temp. System	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
98	FCV-115A A Venturi Liquor Flow	F5	N	N	Y	B	Batch	3 gal / year	3	52.75	D	15 - 103	5.98938E-07	Y	Y
98	FCV-115B B Venturi Liquor Flow	F5	N	N	Y	B	Batch	3 gal / year	3	52.75	D	15 - 103	5.98938E-07	Y	Y
98	FCV-115C C Venturi Liquor Flow	F5	N	N	Y	B	Batch	3 gal / year	3	52.75	D	15 - 103	5.98938E-07	Y	Y
81	FCV-119A A. Napth Scrubber Makeup Liquor Flow	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
81	FCV-119B B. Napth Scrubber Makeup Liquor Flow	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
81	FCV-119C C. Napth Scrubber Makeup Liquor Flow	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
81	FCV-900 D4/D5 Liq. M/U Flow Sys. P.S.	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
81	FT-104A A Primary Liquor Flow	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
81	FT-104B B Primary Liquor Flow	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
81	FT-104C C Primary Liquor Flow	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
98	FT-115A A Venturi Liquor Flow	F5	N	N	Y	B	Batch	3 gal / year	3	52.75	D	15 - 103	5.98938E-07	Y	Y
94	FT-106A A. Primary Cooler Tar Flow system	F1	N	N	Y	A	Batch	3 gal / year	3	1,222.38	D	430 - 2600	1.69756E-05	Y	Y
94	FT-106B B. Primary Cooler Tar Flow system	F1	N	N	Y	A	Batch	3 gal / year	3	1,222.38	D	430 - 2600	1.69756E-05	Y	Y
94	FT-106C C. Primary Cooler Tar Flow system	F1	N	N	Y	A	Batch	3 gal / year	3	1,222.38	D	430 - 2600	1.69756E-05	Y	Y
98	FT-115B B Venturi Liquor Flow	F5	N	N	Y	B	Batch	3 gal / year	3	52.75	D	15 - 103	5.98938E-07	Y	Y
98	FT-115C C Venturi Liquor Flow	F5	N	N	Y	B	Batch	3 gal / year	3	52.75	D	15 - 103	5.98938E-07	Y	Y
81	FT-119A A Napth Scrubber Makeup Liquor Flow	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
81	FT-119B B Napth Scrubber Makeup Liquor Flow	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
81	FT-119C C Napth Scrubber Makeup Liquor Flow	F5	N	N	Y	B	Batch	3 gal / year	3		D	26.3 - 63.1	0.00000E+00	Y	Y
85	FT-184 Primary Cooler Tar to T304B Flow	F1	N	N	Y	A	Batch	3 gal / year	3	1,088.67	D	459 - 3000	1.23618E-05	Y	Y
101	FT-184 Gear Pump Tar Flow System	F1	N	N	Y	A	Batch	3 gal / year	3	51.56	D	19.2 - 110	7.44051E-07	Y	Y
115	FT-185 Flushing Liquor Tar from T302 Flow	F1	N	N	Y	A	Batch	3 gal / year	3	105.28	D	21.80 - 410	1.51940E-06	Y	Y
94	FT-185 Tar Flow System to T304B	F1	N	N	Y	A	Batch	3 gal / year	3	1,222.38	D	430 - 2600	1.69756E-05	Y	Y
81	FT-T340A West Surge Tank Makeup Liquor Flow	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
81	FT-T340B East Surge Tank Makeup Liquor Flow	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
98	LCV-120A A Napth Scrubber Liquor Level System	F5	N	N	Y	B	Batch	3 gal / year	3	52.75	D	15 - 103	5.98938E-07	Y	Y
98	LCV-120B B Napth Scrubber Liquor Level System	F5	N	N	Y	B	Batch	3 gal / year	3	52.75	D	15 - 103	5.98938E-07	Y	Y
98	LCV-120C C Napth Scrubber Liquor Level System	F5	N	N	Y	B	Batch	3 gal / year	3	52.75	D	15 - 103	5.98938E-07	Y	Y
81	LCV-T340A West Surge Tank Level System	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
81	LCV-T340B East Surge Tank Level System	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
98	LT-120A A Napth Scrubber	F5	N	N	Y	B	Batch	3 gal / year	3	52.75	D	15 - 103	5.98938E-07	Y	Y
98	LT-120B B Napth Scrubber	F5	N	N	Y	B	Batch	3 gal / year	3	52.75	D	15 - 103	5.98938E-07	Y	Y
98	LT-120C C Napth Scrubber	F5	N	N	Y	B	Batch	3 gal / year	3	52.75	D	15 - 103	5.98938E-07	Y	Y
81	LT-L100B L100B Primary Decanter Liquor	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
81	LT-L100C L100C Primary Decanter Liquor	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
81	LT-L100D L100D Primary Decanter Liquor	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
81	LT-L100E L100E Primary Decanter Liquor	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
85	LT-L100B1 L100B Primary Decanter Tar	F1	N	N	Y	A	Batch	3 gal / year	3	1,088.67	D	459 - 3000	1.23618E-05	Y	Y

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EPA-USS-0330959

Reference Waste Stream I.D. #	Description of Waste Stream	Type of Waste Stream	Waste Stream Controlled for Benzene by Subpart FF	Waste Stream Hardpiped Between Two Subpart L Units	Water Content >10% (Y/N)	Determination Method: Water Content	Type of Discharge: (Cont./ Bat.)	Flow Rate or Volume Per Occurrence	Annual Waste Quantity (gal)	Annual Average Flow Weighted Benzene Concentration (mg/l)	Determination Method: Benzene Concentration	Range of Benzene Concentration (mg/l)	Annual Benzene Quantity (Mg)	Return to Process (Y/N)	Tab Component (Y/N)
85	LT-L100C1 L100C Primary Decanter Tar	F1	N	N	Y	A	Batch	3 gal / year	3	1,088.67	D	459 - 3000	1.23618E-05	Y	Y
	Primary Pumphouse														
85	LT-L100D1 L100D Primary Decanter Tar	F1	N	N	Y	A	Batch	3 gal / year	3	1,088.67	D	459 - 3000	1.23618E-05	Y	Y
85	LT-L100E1 L100E Primary Decanter Tar	F1	N	N	Y	A	Batch	3 gal / year	3	1,088.67	D	459 - 3000	1.23618E-05	Y	Y
85	LT-L100B1 L100B Liquor/Tar Interface System	F1	N	N	Y	A	Batch	3 gal / year	3	1,088.67	D	459 - 3000	1.23618E-05	Y	Y
85	LT-L100C1 L100C Liquor/Tar Interface System	F1	N	N	Y	A	Batch	3 gal / year	3	1,088.67	D	459 - 3000	1.23618E-05	Y	Y
85	LT-L100D1 L100D Liquor/Tar Interface System	F1	N	N	Y	A	Batch	3 gal / year	3	1,088.67	D	459 - 3000	1.23618E-05	Y	Y
85	LT-L100E1 L100E Liquor/Tar Interface System	F1	N	N	Y	A	Batch	3 gal / year	3	1,088.67	D	459 - 3000	1.23618E-05	Y	Y
101	LT-T301 Flushing Tar	F1	N	N	Y	A	Batch	3 gal / year	3	51.56	D	19.2 - 110	7.44051E-07	Y	Y
101	LT-T301 Tank Level System	F1	N	N	Y	A	Batch	3 gal / year	3	51.56	D	19.2 - 110	7.44051E-07	Y	Y
115	LT-T302A Flushing Tar	F1	N	N	Y	A	Batch	3 gal / year	3	105.28	D	21.80 - 410	1.51940E-06	Y	Y
115	LT-T302B Flushing Tar	F1	N	N	Y	A	Batch	3 gal / year	3	105.28	D	21.80 - 410	1.51940E-06	Y	Y
115	LT-T302A Tank Level System	F1	N	N	Y	A	Batch	3 gal / year	3	105.28	D	21.80 - 410	1.51940E-06	Y	Y
115	LT-T302B Tank Level System	F1	N	N	Y	A	Batch	3 gal / year	3	105.28	D	21.80 - 410	1.51940E-06	Y	Y
81	LT-T340A Primary Liquor Surge Tank	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
81	LT-T340A West Surge Tank Level System	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
81	LT-T340B East Surge Tank Level System	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
81	LT-T340B Primary Liquor Surge Tank	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
94	LT-T345 Tar Collector Level System	F1	N	N	Y	A	Batch	3 gal / year	3	1,222.38	D	430 - 2600	1.69756E-05	Y	Y
81	PT-105A Primary Cooler Liquor Spray	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
81	PT-108A Primary Cooler Liquor Spray	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
81	PT-108B Primary Cooler Liquor Spray	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
81	PT-108C Primary Cooler Liquor Spray	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
81	PT-109A Primary Cooler Liquor Spray Pressure	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
81	PT-109B Primary Cooler Liquor Spray Pressure	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
81	PT-109C Primary Cooler Liquor Spray Pressure	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
81	PT-183 Primary Cooler Liquor Header	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
81	TRCV-112A A. Primary Clr. Gas Outlet Temp. System	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
81	TRCV-112C C. Primary Clr. Gas Outlet Temp. System	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
	Final Pumphouse														
92	FCV - 203C C Benzol Scrubber Level System	F2	N	N	Y	B	Batch	3 gal / year	3	7,720.55	D	10000 - 14300	8.76668E-05	Y	Y
91	FCV-111-S P.W. Strainer Backwash Hdr. Flow	F5	N	N	Y	B	Batch	3 gal / year	3	116.24	D	50 - 370	1.31994E-06	Y	Y
91	FT 100 A1 "A" F. Plate cooler H.P.W. Flow	F5	N	N	Y	B	Batch	3 gal / year	3	116.24	D	50 - 370	1.31994E-06	Y	Y
91	FT 100 C1 "C" F. Plate cooler H.P.W. Flow	F5	N	N	Y	B	Batch	3 gal / year	3	116.24	D	50 - 370	1.31994E-06	Y	Y
91	FT 100 B1 "B" F. Plate cooler H.P.W. Flow	F5	N	N	Y	B	Batch	3 gal / year	3	116.24	D	50 - 370	1.31994E-06	Y	Y
91	FT-111-S P.W. Strainer Backwash Hdr. Flow	F5	N	N	Y	B	Batch	3 gal / year	3	116.24	D	50 - 370	1.31994E-06	Y	Y
91	FT-170 B Final Cooler Water Flow System	F5	N	N	Y	B	Batch	3 gal / year	3	116.24	D	50 - 370	1.31994E-06	Y	Y
107	Light Oil Decanter Water Make up	A4	N	N	Y	C	Batch	3 gal / year	3	672.57	D	220 - 1260	7.63705E-06	Y	Y
110	FT-203B B Benzol Scrubber Oil System	F2	N	N	Y	C	Batch	3 gal / year	3	609.33	D	218 -1600	6.91898E-06	Y	Y
110	FT-203C C Benzol Scrubber Oil System	F2	N	N	Y	C	Batch	3 gal / year	3	609.33	D	218 -1600	6.91898E-06	Y	Y
110	FT-203B B Benzol Scrubber Lean Wash Oil	F2	N	N	Y	C	Batch	3 gal / year	3	609.33	D	218 -1600	6.91898E-06	Y	Y
110	FT-203C C Benzol Scrubber Lean Wash Oil	F2	N	N	Y	C	Batch	3 gal / year	3	609.33	D	218 -1600	6.91898E-06	Y	Y
91	LCV 201B "B" Final Cooler Level Control	F5	N	N	Y	B	Batch	3 gal / year	3	116.24	D	50 - 370	1.31994E-06	Y	Y
91	LCV 201C "C" Final Cooler Level Control	F5	N	N	Y	B	Batch	3 gal / year	3	116.24	D	50 - 370	1.31994E-06	Y	Y
92	LCV-203B B Benzol Scrubber Level System	F2	N	N	Y	B	Batch	3 gal / year	3	7,720.55	D	10000 - 14300	8.76668E-05	Y	Y
92	LCV-203C C Benzol Scrubber Level System	F2	N	N	Y	B	Batch	3 gal / year	3	7,720.55	D	10000 - 14300	8.76668E-05	Y	Y
91	LT 201B B Final Cooler	F5	N	N	Y	B	Batch	3 gal / year	3	116.24	D	50 - 370	1.31994E-06	Y	Y
91	LT-201C C Final Cooler	F5	N	N	Y	B	Batch	3 gal / year	3	116.24	D	50 - 370	1.31994E-06	Y	Y
92	LT-203B B Benzol Scrubber Rich Wash Oil	F2	N	N	Y	B	Batch	3 gal / year	3	7,720.55	D	10000 - 14300	8.76668E-05	Y	Y
92	LT-203C C Benzol Scrubber Rich Wash Oil	F2	N	N	Y	B	Batch	3 gal / year	3	7,720.55	D	10000 - 14300	8.76668E-05	Y	Y
91	PCV -111 Pump Discharge Pressure Relieve Hdr.	F5	N	N	Y	B	Batch	3 gal / year	3	116.24	D	50 - 370	1.31994E-06	Y	Y
91	PT -111 Pump Discharge Pressure Relieve Hdr.	F5	N	N	Y	B	Batch	3 gal / year	3	116.24	D	50 - 370	1.31994E-06	Y	Y
91	TIC 100B B" F. Clr. Gas outlet Temp. System	F5	N	N	Y	B	Batch	3 gal / year	3	116.24	D	50 - 370	1.31994E-06	Y	Y
	Distillation														
183	FT-350 Distillation Sump Flow	A5	N	N	Y	C	Batch	3 gal / year	3	26.16	D	2.7 - 105.0	2.97075E-07	Y	Y

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EPA-USS-0330960

Reference Waste Stream I.D. #	Description of Waste Stream	Type of Waste Stream	Waste Stream Controlled for Benzene by Subpart FF	Waste Stream Hardpiped Between Two Subpart L Units	Water Content >10% (Y/N)	Determination Method: Water Content	Type of Discharge: (Cont./ Bat.)	Flow Rate or Volume Per Occurrence	Annual Waste Quantity (gal)	Annual Average Flow Weighted Benzene Concentration (mg/l)	Determination Method: Benzene Concentration	Range of Benzene Concentration (mg/l)	Annual Benzene Quantity (Mg)	Return to Process (Y/N)	Tab Component (Y/N)
92	FCV 446 V404 Rich Oil Flow System	F2	N	N	Y	B	Batch	3 gal / year	3	7,720.55	D	10000 - 14300	8.76668E-05	Y	Y
153	FT- 427A Tar Flow System	F1	N	N	N	A	Batch	3 gal / year	3	70.88	D	2.40 - 250	8.04786E-07	Y	Y
92	FT-446 V404 Rich Oil Flow System	F2	N	N	Y	B	Batch	3 gal / year	3	7,720.55	D	10000 - 14300	8.76668E-05	Y	Y
153	FT-484 Tar Flow System to T-9	F1	N	N	N	A	Batch	3 gal / year	3	70.88	D	2.40 - 250	8.04786E-07	Y	Y
92	FT-446A V404A Wash Oil	F2	N	N	Y	B	Batch	3 gal / year	3	7,720.55	D	10000 - 14300	8.76668E-05	Y	Y
110	FT-490A Lean Wash Oil to V-1A	F2	N	N	Y	C	Batch	3 gal / year	3	609.33	D	218 -1600	6.91898E-06	Y	Y
92	FT-453 Rich Oil Flow tp E453A	F2	N	N	Y	B	Batch	3 gal / year	3	7,720.55	D	10000 - 14300	8.76668E-05	Y	Y
85	LT-304A P C Tar Storage	F1	N	N	Y	A	Batch	3 gal / year	3	1,088.67	D	459 - 3000	1.23618E-05	Y	Y
85	LT-304B Tar Storage	F1	N	N	Y	A	Batch	3 gal / year	3	1,088.67	D	459 - 3000	1.23618E-05	Y	Y
99	LT-304C Flushing Tar Storage	F1	N	N	Y	A	Batch	3 gal / year	3	795.77	D	110 - 1700	9.03596E-06	Y	Y
99	LT-306C Flushing Tar Storage	F1	N	N	Y	A	Batch	3 gal / year	3	795.77	D	110 - 1700	9.03596E-06	Y	Y
153	LCV-401 Flashdrum Level Control System	F1	N	N	N	A	Batch	3 gal / year	3	70.88	D	2.40 - 250	8.04786E-07	Y	Y
112	LCV-414 V421 Light Oil Level System	F4	N	N	Y	C	Batch	3 gal / year	3	788,552.88	D	770931 - 952500	8.95402E-03	Y	Y
107	LCV-415 V421 Water Level System	A4	N	N	Y	C	Batch	3 gal / year	3	672.57	D	220 - 1260	7.63705E-06	Y	Y
110	LCV-416A V404A Lean Oil Level System	F4	N	N	Y	C	Batch	3 gal / year	3	609.33	D	218 -1600	6.91898E-06	Y	Y
152	LCV-475A V-1A Demucker Level Ctrl. System	D	N	N	N	C	Batch	3 gal / year	3	6.00	D	0.20 - 3	6.81300E-08	Y	Y
153	LT-401 Flashdrum Level Control System	F1	N	N	N	A	Batch	3 gal / year	3	70.88	D	2.40 - 250	8.04786E-07	Y	Y
110	LT-V404A Lean Wash Oil Light Oil Stripper	D	N	N	Y	C	Batch	3 gal / year	3	609.33	D	218 -1600	6.91898E-06	Y	Y
112	LT-414 V421 Light Oil Decanter Light Oil	D	N	N	Y	C	Batch	3 gal / year	3	788,552.88	D	770931 - 952500	8.95402E-03	Y	Y
112	LT-414 V421 Light Oil Level System	F4	N	N	Y	C	Batch	3 gal / year	3	788,552.88	D	770931 - 952500	8.95402E-03	Y	Y
107	LT-415 V421 Water Level System	A4	N	N	Y	C	Batch	3 gal / year	3	672.57	D	220 - 1260	7.63705E-06	Y	Y
110	LT-416A V404A Light Oil Stripper Lean Oil	D	N	N	Y	C	Batch	3 gal / year	3	609.33	D	218 -1600	6.91898E-06	Y	Y
110	LT-416A V404A Lean Oil Level System	D	N	N	Y	C	Batch	3 gal / year	3	609.33	D	218 -1600	6.91898E-06	Y	Y
111	LT-418 Dist. Vent Drip Tank Level	D	N	N	Y	C	Batch	3 gal / year	3	12,300	D	5300 - 21000	1.39667E-04	Y	Y
111	LT-417A V423A K.O. Drum	D	N	N	Y	C	Batch	3 gal / year	3	12,300	D	5300 - 21000	1.39667E-04	Y	Y
152	LT-475A "A" Demucker	F2	N	N	N	C	Batch	3 gal / year	3	6.00	D	0.20 - 3	6.81300E-08	Y	Y
152	LT-475A V-1A Demucker Level Ctrl. System	F2	N	N	N	C	Batch	3 gal / year	3	6.00	D	0.20 - 3	6.81300E-08	Y	Y
153	LT-499 Chloride Drum Level System	F1	N	N	N	A	Batch	3 gal / year	3	70.88	D	2.40 - 250	8.04786E-07	Y	Y
153	LT-T9 Tank Level System	F1	N	N	N	A	Batch	3 gal / year	3	70.88	D	2.40 - 250	8.04786E-07	Y	Y
153	LT-T304A Tank Level System	F1	N	N	N	A	Batch	3 gal / year	3	70.88	D	2.40 - 250	8.04786E-07	Y	Y
99	LT-T304B Tank Level System	F1	N	N	Y	A	Batch	3 gal / year	3	795.77	D	110 - 1700	9.03596E-06	Y	Y
99	LT-T304C Tank Level System	F1	N	N	Y	A	Batch	3 gal / year	3	795.77	D	110 - 1700	9.03596E-06	Y	Y
99	LT-T306C Tank Level System	F1	N	N	Y	A	Batch	3 gal / year	3	795.77	D	110 - 1700	9.03596E-06	Y	Y
112	LT-T311 Tank Level System	F4	N	N	Y	C	Batch	3 gal / year	3	788,552.88	D	770931 - 952500	8.95402E-03	Y	Y
112	LT-T312 Tank Level System	F4	N	N	Y	C	Batch	3 gal / year	3	788,552.88	D	770931 - 952500	8.95402E-03	Y	Y
104	LT-T363A Tank Level System	F1	N	N	Y	A	Batch	3 gal / year	3	453.54	D	16 - 1420	5.14997E-06	Y	Y
104	LT-T363D Tank Level System	F1	N	N	Y	A	Batch	3 gal / year	3	453.54	D	16 - 1420	5.14997E-06	Y	Y
183	LT-T7800 Tank Level System	A5	N	N	Y	C	Batch	3 gal / year	3	26.16	D	2.7 - 105	2.97075E-07	Y	Y
183	LT-T7810 Tank Level System	A5	N	N	Y	C	Batch	3 gal / year	3	26.16	D	2.7 - 105	2.97075E-07	Y	Y
183	PT-350 Distillation Sump Discharge	A5	N	N	Y	C	Batch	3 gal / year	3	26.16	D	2.7 - 105	2.97075E-07	Y	Y
183	PT-351 Dist. Sump Pressure System	A5	N	N	Y	C	Batch	3 gal / year	3	26.16	D	2.7 - 105	2.97075E-07	Y	Y
183	PCV-7840 Dist. Sump Press. Control System	A5	N	N	Y	C	Batch	3 gal / year	3	26.16	D	2.7 - 105	2.97075E-07	Y	Y
183	PT- 7840 Dist. Sump Press. Control System	A5	N	N	Y	C	Batch	3 gal / year	3	26.16	D	2.7 - 105	2.97075E-07	Y	Y
	Control Valves - Gas Line														
94	FCV-106A A Primary Cooler Tar	F1	N	N	Y	A	Batch	3 gal / year	3	1,222.38	D	430 - 2600	1.69756E-05	Y	Y
91	FCV-111S Process Water Strainer Backwash	F5	N	N	Y	B	Batch	3 gal / year	3	116.24	D	50 - 370	1.31994E-06	Y	Y
81	FCV-112A A Primary Cooler Bottom Temp.	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
81	FCV-112B B Primary Cooler Bottom Temp.	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
98	FCV-115A A Venturi Liquor Flow	F5	N	N	Y	B	Batch	3 gal / year	3	52.75	D	15 - 103	5.98938E-07	Y	Y
98	FCV-115B B Venturi Liquor Flow	F5	N	N	Y	B	Batch	3 gal / year	3	52.75	D	15 - 103	5.98938E-07	Y	Y
98	FCV-115C C Venturi Liquor Flow	F5	N	N	Y	B	Batch	3 gal / year	3	52.75	D	15 - 103	5.98938E-07	Y	Y
81	FCV-119A A Napth Makeup Liquor Flow	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
81	FCV-119B B Napth Makeup Liquor Flow	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
81	FCV-119C C Napth Makeup Liquor Flow	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
81	FCV-131 2P Liquor Makeup Flow	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y

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Reference Waste Stream I.D. #	Description of Waste Stream	Type of Waste Stream	Waste Stream Controlled for Benzene by Subpart FF	Waste Stream Hardpiped Between Two Subpart L Units	Water Content >10% (Y/N)	Determination Method: Water Content	Type of Discharge: (Cont./ Bat.)	Flow Rate or Volume Per Occurrence	Annual Waste Quantity (gal)	Annual Average Flow Weighted Benzene Concentration (mg/l)	Determination Method: Benzene Concentration	Range of Benzene Concentration (mg/l)	Annual Benzene Quantity (Mg)	Return to Process (Y/N)	Tab Component (Y/N)
81	FCV-131 P.S. Flushing Liquor Makeup	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
110	FCV-203B B Benzol Scrubber Oil Flow	D	N	N	Y	C	Batch	3 gal / year	3	609.33	D	218 -1600	6.91898E-06	Y	Y
110	FCV-203C C Benzol Scrubber Oil Flow	D	N	N	Y	C	Batch	3 gal / year	3	609.33	D	218 -1600	6.91898E-06	Y	Y
102	FCV-422 Gary Liquor Bleedoff Flow	F5	N	N	Y	B	Batch	3 gal / year	3	10.09	D	6.6 - 14	1.14559E-07	Y	Y
95	FCV-422 Liquor Bleedoff	F5	N	N	Y	B	Batch	3 gal / year	3	12.36	D	9.6 - 16	1.40315E-07	Y	Y
113	FCV-422 Liquor Bleedoff 5/7	F5	N	N	Y	B	Batch	3 gal / year	3	9.39	D	7.5 - 15	1.06611E-07	Y	Y
99	FCV-427A FT 427A Tar Flow	F1	N	N	Y	A	Batch	3 gal / year	3	795.77	D	110 - 1700	1.14846E-05	Y	Y
92	FCV-446A V404A Rich Oil Flow	D	N	N	Y	B	Batch	3 gal / year	3	7,720.55	D	10000 - 14300	8.76668E-05	Y	Y
98	LCV-120A A Napth Scrubber Liquor Level	F5	N	N	Y	B	Batch	3 gal / year	3	52.75	D	15 - 103	5.98938E-07	Y	Y
98	LCV-120B B Napth Scrubber Liquor Level	F5	N	N	Y	B	Batch	3 gal / year	3	52.75	D	15 - 103	5.98938E-07	Y	Y
98	LCV-120C C Napth Scrubber Liquor Level	F5	N	N	Y	B	Batch	3 gal / year	3	52.75	D	15 - 103	5.98938E-07	Y	Y
83	LCV-126 Still Decanter Liquor Level	F5	N	N	Y	B	Batch	3 gal / year	3	10.78	D	3.2 - 16	1.22350E-07	Y	Y
87	LCV-127 2P B101 Liquor	F5	N	N	Y	B	Batch	3 gal / year	3	11.15	D	3.50 - 49.5	1.26622E-07	Y	Y
91	LCV-201B B Final Cooler level	F5	N	N	Y	B	Batch	3 gal / year	3	116.24	D	50 - 370	1.31994E-06	Y	Y
91	LCV-201C C Final Cooler Level	F5	N	N	Y	B	Batch	3 gal / year	3	116.24	D	50 - 370	1.31994E-06	Y	Y
92	LCV-203B B Benzol Scrubber Oil Level	F2	N	N	Y	B	Batch	3 gal / year	3	7,720.55	D	10000 - 14300	8.76668E-05	Y	Y
92	LCV-203C C Benzol Scrubber Oil Level	F2	N	N	Y	B	Batch	3 gal / year	3	7,720.55	D	10000 - 14300	8.76668E-05	Y	Y
112	LCV-414 V421 Light Oil Decanter	F4	N	N	Y	C	Batch	3 gal / year	3	788,552.88	D	770931 - 952500	8.95402E-03	Y	Y
107	LCV-415 V421 Water Level L.O.Decanter	A4	N	N	Y	C	Batch	3 gal / year	3	672.57	D	220 - 1260	7.63705E-06	Y	Y
111	LCV-417A/B Knockout Drum	F4	N	N	Y	C	Batch	3 gal / year	3	12,300	D	5300 - 21000	1.39667E-04	Y	Y
81	LCV-422 D-5/7 Flushing Liquor	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
81	LCV-422 T7 Liquor Level	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
81	LCV-422A T11 Flushing Liquor	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
152	LCV-475A V-1A Demucker Level	D	N	N	N	C	Batch	3 gal / year	3	6.00	D	0.20 - 3	6.81300E-08	Y	Y
81	LCV-T340A West Surge Tank Liquor Level	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63.1	5.22078E-07	Y	Y
81	LCV-T340B East Surge Tank Liquor Level	F5	N	N	Y	B	Batch	3 gal / year	3	45.98	D	26.3 - 63	5.22078E-07	Y	Y
91	TCV-102A A Final Cooler Liquor Flow In	F5	N	N	Y	B	Batch	3 gal / year	3	116.24	D	50 - 370	1.31994E-06	Y	Y
91	TCV-102B B Final Cooler Liquor Flow In	F5	N	N	Y	B	Batch	3 gal / year	3	116.24	D	50 - 370	1.31994E-06	Y	Y
91	TCV-102C C Final Cooler Liquor Flow In	F5	N	N	Y	B	Batch	3 gal / year	3	116.24	D	50 - 370	1.31994E-06	Y	Y
	Environmental Treatment Facility - Desulfurization Plant														
146	LCV1012 Contactor LCV Rich Amine LCV	F3	N	N	Y	C	Batch	41.1gal/year	41.1	27.58	D	15 - 50	4.28966E-06	Y	Y
147	FCV1015 Contactor FCV Lean Amine FCV	F3	N	N	Y	C	Batch	41.1/ year	41.1	4.49	D	0.002 - 29	6.98655E-07	Y	Y
148	LCV1013 Amine Water Wash LCV	F8	N	N	Y	C	Batch	1.1/ year	1.1	21.33	D	11 - 40	8.88213E-08	Y	Y
148	FCV1711 Amine Water Wash FCV	F8	N	N	Y	C	Batch	4.5/ year	4.5	21.33	D	11 - 40	3.63360E-07	Y	Y
147	TCV1576 Lean Amine Solution Exchanger TCV	F3	N	N	Y	C	Batch	1766/year	1766	4.49	D	0.002 - 29	3.00201E-05	Y	Y
149	LCV1101 Rich Reflux Accumulator LCV	F9	N	N	Y	C	Batch	1.9/ year	1.9	11.27	D	5 - 21	8.10242E-08	Y	Y
150	FCV2751 Lean Reflux Stripper FCV	F9	N	N	Y	C	Batch	0.1/ year	0.1	5.85	D	0.01 - 32	2.21440E-09	Y	Y
150	FCV2772 Lean Reflux Reboiler LCV	F9	N	N	Y	C	Batch	1.3/ year	1.3	5.85	D	0.01 - 32	2.87872E-08	Y	Y
147	LCV1531 Super-Stripper Lean Amine LCV	F3	N	N	Y	C	Batch	1.3/ year	1.3	4.49	D	0.002 - 29	2.20986E-08	Y	Y
147	FT1014 Lean Amine to Contactor	F3	N	N	Y	C	Batch	3 gal / year	3	4.49	D	0.002 - 29	5.09967E-08	Y	Y
147	FT1015 Lean Amine to Contactor	F3	N	N	Y	C	Batch	3 gal / year	3	4.49	D	0.002 - 29	5.09967E-08	Y	Y
147	FT1071 TK1070 Super Stripper Lean Amine	F3	N	N	Y	C	Batch	3 gal / year	3	4.49	D	0.002 - 29	5.09967E-08	Y	Y
148	FT1711 Amine Water Wash	F8	N	N	Y	C	Batch	3 gal / year	3	21.33	D	11 - 40	2.42240E-07	Y	Y
149	FT1791 P1790/1800 Rich Reflux Pumps	F9	N	N	Y	C	Batch	3 gal / year	3	11.27	D	5 - 21	1.27933E-07	Y	Y
149	FT2751 Rich Reflux from P1790/1800	F9	N	N	Y	C	Batch	3 gal / year	3	11.27	D	5 - 21	1.27933E-07	Y	Y
146	LT1012 Rich Amine Contactor	F3	N	N	Y	C	Batch	3 gal / year	3	27.58	D	15 - 50	3.13114E-07	Y	Y
148	LT1013 Amine Water Wash Contactor	F8	N	N	Y	C	Batch	3 gal / year	3	21.33	D	11 - 40	2.42240E-07	Y	Y
147	LT1081 Lean Amine Surge Tank	F3	N	N	Y	C	Batch	3 gal / year	3	4.49	D	0.002 - 29	5.09967E-08	Y	Y
147	LT1091 Lean Amine Stripper	F3	N	N	Y	C	Batch	3 gal / year	3	4.49	D	0.002 - 29	5.09967E-08	Y	Y
149	LT1101 Rich Reflux (reflux accum)	F9	N	N	Y	C	Batch	3 gal / year	3	11.27	D	5 - 21	1.27933E-07	Y	Y
M	LT1200 TK1200 COG Drip Tank	A1	N	N	Y	C	Batch	3 gal / year	3	20.32	D	6 - 35	2.30677E-07	Y	Y
151	LT1531 E1530 Reclaimer	J1	N	N	Y	C	Batch	3 gal / year	3	0.45	D	0.001 - 9	5.16274E-09	Y	Y
150	LT2772 Lean Reflux Stripper Reboiler	F9	N	N	Y	C	Batch	3 gal / year	3	5.85	D	0.01 - 32	6.64319E-08	Y	Y
146	PDT1031 Rich Amine Solution Filter	F3	N	N	Y	C	Batch	3 gal / year	3	27.58	D	15 - 50	3.13114E-07	Y	Y
146	PDT1041 Rich Amine Solution Filter	F3	N	N	Y	C	Batch	3 gal / year	3	27.58	D	15 - 50	3.13114E-07	Y	Y

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Maintenance-Instrumentation and Control Valves

Reference Waste Stream I.D. #	Description of Waste Stream	Type of Waste Stream	Waste Stream Controlled for Benzene by Subpart FF	Waste Stream Hardpiped Between Two Subpart L Units	Water Content >10% (Y/N)	Determination Method: Water Content	Type of Discharge: (Cont./ Bat.)	Flow Rate or Volume Per Occurrence	Annual Waste Quantity (gal)	Annual Average Flow Weighted Benzene Concentration (mg/l)	Determination Method: Benzene Concentration	Range of Benzene Concentration (mg/l)	Annual Benzene Quantity (Mg)	Return to Process (Y/N)	Tab Component (Y/N)
147	PDT1051 Lean Amine Solution Filter	F3	N	N	Y	C	Batch	3 gal / year	3	4.49	D	0.002 - 29	5.09967E-08	Y	Y
147	PDT1061 Lean Amine Solution Filter	F3	N	N	Y	C	Batch	3 gal / year	3	4.49	D	0.002 - 29	5.09967E-08	Y	Y
	Waste Water Treatment Plant (WWTP)														
164	FIC 7000 Oil/Tar Separators	A3	N	N	Y	C	Batch	3 gal / year	3	10.34	D	5 -18	1.17442E-07	Y	Y
162	FT 7200A Feed Ammonia Still	A2	N	N	Y	C	Batch	3 gal / year	3	10.08	D	8.9 - 12	1.14498E-07	Y	Y
163	FT 7200J Exit Ammonia Still	A6	N	N	Y	C	Batch	3 gal / year	3	0.263	D	0 - 2	2.98663E-09	Y	Y
									2800.4				TAB 0.055807		

Reporting Year: ***2006***

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Section 9
Mtce-Strainer Drainage

EPA-USS-0330964

Maintenance-Strainer Drainage

Reference Waste Stream I.D. #	Description of Waste Stream	Type of Waste Stream	Waste Stream Controlled for Benzene by Subpart FF	Waste Stream Hardpiped Between Two Subpart L Units	Water Content >10% (Y/N)	Determination Method: Water Content	# of Occurrences of Draining	Volume per Occurrence (gallons)	Annual Waste Quantity (gal)	Annual Average Flow Weighted Benzene Concentration (mg/l)	Determination Method: Benzene Concentration	Range of Benzene Concentration (mg/l)	Annual Benzene Quantity (Mg)	Return to Process (Y/N)	Tab Component (Y/N)
102	ST3 Flushing Liquor Strainer	F5	N	N	Y	B	0	802.4	0	10.09	D	6.6 - 14	0.00E+00	Y	Y
102	ST4 Flushing Liquor Strainer	F5	N	N	Y	B	2	765.7	1531.4	10.09	D	6.6 - 14	5.85E-05	Y	Y
95	ST5 Flushing Liquor Strainer	F5	N	N	Y	B	4	1502.8	6011.2	12.36	D	9.6 - 16	2.81E-04	Y	Y
95	ST6 Flushing Liquor Strainer	F5	N	N	Y	B	1	1502.8	1502.8	12.36	D	9.6 - 16	7.03E-05	Y	Y
88	ST7 Flushing Liquor Strainer	F5	N	N	Y	B	5	1074.4	5372	13.99	D	10 - 19	2.84E-04	Y	Y
88	ST8 Flushing Liquor Strainer	F5	N	N	Y	B	6	1074.4	6446.4	13.99	D	10 - 19	3.41E-04	Y	Y
83	ST9 Flushing Liquor Strainer	F5	N	N	Y	B	3	848.6	2545.8	10.78	D	3.2 - 16	1.04E-04	Y	Y
83	ST10 Flushing Liquor Strainer	F5	N	N	Y	B	4	843.2	3372.8	10.78	D	3.2 - 16	1.38E-04	Y	Y
113	ST5/7E Flushing Liquor Strainer	F5	N	N	Y	B	4	231.2	924.8	9.39	D	7.5 - 15	3.29E-05	Y	Y
113	ST5/7W Flushing Liquor Strainer	F5	N	N	Y	B	2	129.2	258.4	9.39	D	7.5 - 15	9.18E-06	Y	Y
91	S111A Process Water Strainer	F5	N	N	Y	B	2	101	202	116.24	D	50 - 370	8.89E-05	Y	Y
91	S111B Process Water Strainer	F5	N	N	Y	B	1	101	101	116.24	D	50 - 370	4.44E-05	Y	Y

28268.6

TAB 0.001452

Reporting Year: 2006

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Section 10

Mtce-Vessel Draining/ Tank Draining

EPA-USS-0330966

Reference Waste Stream I.D. #	Description of Waste Stream	Type of Waste Stream	Waste Stream Controlled for Benzene by Subpart FF	Waste Stream Hardpiped Between Two Subpart L Units	Water Content >10% (Y/N)	Determination Method: Water Content	# of Occurrences of Draining	Volume per Occurrence (gallons)	Annual Waste Quantity (gal)	Annual Average Flow Weighted Benzene Concentration (mg/l)	Determination Method: Benzene Concentration	Range of Benzene Concentration (mg/l)	Annual Benzene Quantity (Mg)	Return to Process (Y/N)	Tab Component (Y/N)
119	B101 Liquor Bleedoff Tank	F6	N	N	Y	B	0	500	0	158.01	D	8.4 - 590	0.0000E+00	Y	Y
120	B104 Liquor Bleedoff Tank	F6	N	N	Y	B	0	500	0	112.89	D	17 - 450	0.0000E+00	Y	Y
76	D101A Flushing Liquor Predecanter	F6/7	N	N	Y	B	1	19000	19000	168.33	D	3 - 710	1.2105E-02	Y	Y
76	D101B Flushing Liquor Predecanter	F6/7	N	N	Y	B	0	19000	0	168.33	D	3 - 710	0.0000E+00	Y	Y
75	D101C Flushing Liquor Predecanter	F6/7	N	N	Y	B	0	19000	0	158.01	D	8.4 - 590	0.0000E+00	Y	Y
75	D101D Flushing Liquor Predecanter	F6/7	N	N	Y	B	1	19000	19000	158.01	D	8.4 - 590	1.1364E-02	Y	Y
76	D102A Flushing Liquor Decanter	F6/7	N	N	Y	B	0	30000	0	168.33	D	3 - 710	0.0000E+00	Y	Y
76	D102B Flushing Liquor Decanter	F6/7	N	N	Y	B	0	30000	0	168.33	D	3 - 710	0.0000E+00	Y	Y
78	D105A Flushing Liquor Predecanter	F6/7	N	N	Y	B	1	19000	19000	32.58	D	9 - 84	2.3432E-03	Y	Y
78	D105B Flushing Liquor Predecanter	F6/7	N	N	Y	B	1	19000	19000	32.58	D	9 - 84	2.3432E-03	Y	Y
77	D105C Flushing Liquor Predecanter	F6/7	N	N	Y	B	0	19000	0	112.89	D	17 - 450	0.0000E+00	Y	Y
77	D105D Flushing Liquor Predecanter	F6/7	N	N	Y	B	0	19000	0	112.89	D	17 - 450	0.0000E+00	Y	Y
78	D106A Flushing Liquor Decanter	F6/7	N	N	Y	B	1	30000	30000	32.58	D	9 - 84	3.6998E-03	Y	Y
75	D106B Flushing Liquor Decanter	F6/7	N	N	Y	B	0	30000	0	32.58	D	9 - 84	0.0000E+00	Y	Y
75	D4 Flushing Liquor Decanter	F6/7	N	N	Y	B	0	28000	0	158.01	D	8.4 - 590	0.0000E+00	Y	Y
	D5 Flushing Liquor Decanter (partial draining in 2006)	F6/7	N	N	Y	B	1		1000	158.01	D	8.4 - 590	5.9808E-04	Y	Y
79	D5/7N Flushing Liquor Decanter	F6/7	N	N	Y	B	0	28000	0	105.28	D	21.8 - 410	0.0000E+00	Y	Y
79	D5/7S Flushing Liquor Decanter	F6/7	N	N	Y	B	0	28000	0	105.28	D	21.8 - 410	0.0000E+00	Y	Y
77	D6 Flushing Liquor Decanter	F6/7	N	N	Y	B	0	28000	0	112.89	D	17 - 450	0.0000E+00	Y	Y
77	D7 Flushing Liquor Decanter	F6/7	N	N	Y	B	0	28000	0	112.89	D	17 - 450	0.0000E+00	Y	Y
80	L100B Primary Decanter (partial draining in 2006)	F6/7	N	N	Y	B	1		1000	1222.38	D	430 - 2600	4.6267E-03	Y	Y
80	L100C Primary Decanter	F6/7	N	N	Y	B	0	28000	0	1222.38	D	430 - 2600	0.0000E+00	Y	Y
80	L100D Primary Decanter	F6/7	N	N	Y	B	0	28000	0	1222.38	D	430 - 2600	0.0000E+00	Y	Y
80	L100E Primary Decanter	F6/7	N	N	Y	B	0	28000	0	1222.38	D	430 - 2600	0.0000E+00	Y	Y
125	T11 Flushing Liquor Surge Tank	F5	N	N	Y	B	0	6000	0	43.58	D	9 - 84	0.0000E+00	Y	Y
105	T2 Flushing Tar Storage Tank	F7/1	N	N	Y	A	0	30000	0	127.62	D	20.3 - 450	0.0000E+00	Y	Y
105	T3 Flushing Tar Storage Tank	F7/1	N	N	Y	A	0	30000	0	127.62	D	20.3 - 450	0.0000E+00	Y	Y
101	T301 Flushing Tar Storage Tank	F7/1	N	N	Y	A	0	92000	0	51.56	D	19.2 - 110	0.0000E+00	Y	Y
115	T302A Flushing Tar Storage Tank	F7/1	N	N	Y	A	0	27000	0	105.28	D	21.80 - 410	0.0000E+00	Y	Y
115	T302B Flushing Tar Storage Tank	F7/1	N	N	Y	A	0	27000	0	105.28	D	21.80 - 410	0.0000E+00	Y	Y
99	T304A Tar Storage Tank	F1/7	N	N	Y	A	0	91000	0	795.77	D	110 - 1700	0.0000E+00	Y	Y
100	T304B Tar Storage Tank	F1/7	N	N	Y	A	0	91000	0	87.14	D	3 - 520	0.0000E+00	Y	Y
99	T304C Tar Storage Tank	F1/7	N	N	Y	A	0	158000	0	795.77	D	110 - 1700	0.0000E+00	Y	Y
99	T306 Tar Storage Tank	F1/7	N	N	Y	A	0	36000	0	795.77	D	110 - 1700	0.0000E+00	Y	Y
112	T311 Light Oil Storage Tank	F4	N	N	Y	C	0	31000	0	788,552.88	D	770931 - 952500	0.0000E+00	Y	Y
112	T312 Light Oil Storage Tank	F4	N	N	Y	C	0	31000	0	788,552.88	D	770931 - 952500	0.0000E+00	Y	Y
134	T340A Primary Cooler Liquor Surge Tank	F5	N	N	Y	B	0	10000	0	1222.38	D	430 - 2600	0.0000E+00	Y	Y
134	T340B Primary Cooler Liquor Surge Tank	F5	N	N	Y	B	0	10000	0	1222.38	D	430 - 2600	0.0000E+00	Y	Y
85	T345 Primary Cooler Tar Storage Tank	F1	N	N	Y	A	0	10000	0	1,088.67	D	459 - 3000	0.0000E+00	Y	Y
104	T363A Tar Storage Tank	F1/7	N	N	Y	A	0	46000	0	453.54	D	16 - 1420	0.0000E+00	Y	Y
104	T363D Tar Storage Tank	F1/7	N	N	Y	A	0	46000	0	453.54	D	16 - 1420	0.0000E+00	Y	Y
116	T6 Liquor Storage Tank (using this stream for rinsing of A Final Cooler in 2006)	F5	N	N	Y	B	1	500	500	14.76	D	6.9 - 24.9	2.7933E-05	Y	Y
124	T7 Flushing Liquor Surge Tank	F5	N	N	Y	B	0	6000	0	158.01	D	8.4 - 590	0.0000E+00	Y	Y
183	T7800 Distillation Surge Tank	F5	N	N	NA	NA	0	NA	NA	26.16	D	2.7 - 105	NA	NA	Y
	Environmental Treatment Facility - Desulfurization														
146	F1030 Rich Amine Filter Vessel	F3	N	N	Y	C	2	199	398	27.58	D	15 - 50	4.1540E-05	Y	Y
146	F1040 Rich Amine Filter Vessel	F3	N	N	Y	C	3	199	597	27.58	D	15 - 50	6.2310E-05	Y	Y
147	F1050 Lean Amine Filter Vessel	F3	N	N	Y	C	8	199	1592	4.491	D	0.002 - 29	2.7062E-05	Y	Y
147	F1060 Lean Amine Filter Vessel	F3	N	N	Y	C	9	199	1791	4.491	D	0.002 - 29	3.0445E-05	Y	Y
151	F1120 Reclaimer Filter	I1	N	N	Y	C	1032	10	10320	0.45	D	0.001 - 9	1.7760E-05	Y	Y
(146)-147	Desulf plant downturn amine system drainage	D	N	N	Y	C	1	40000	40000	27.58	D	15 - 50	4.1749E-03	Y	Y
	Environmental Treatment Facility - Waste Water Treatment Plant (WWTP)														
160	T7000 Oil/Tar Separator Tank	F5	N	Y	Y	C	0	5000	0	167.51	D	1 - 78	0.0000E+00	Y	Y
161	T7010 Oil/Tar Separator Tank	F5	N	Y	Y	C	0	5000	0	456.27	D	2.5 - 6710	NA	Y	Y
160	T7020 Light Oil Storage Tank	F4	N	Y	Y	NA	0	250	0	167.51	D	1 - 78	NA	Y	Y
161	T7030 Tar Storage Tank	F1	N	Y	Y	NA	0	250	0	456.27	D	2.5 - 6710	NA	Y	Y
162	T7100 Process Water Storage Tank	F10	N	Y	Y	C	0	75000	0	10.08	D	8.9 - 12	0.0000E+00	Y	Y
162	T7110 Process Water Storage Tank	F5	N	Y	Y	C	0	75000	0	10.08	D	8.9 - 12	0.0000E+00	Y	Y
162	T7100 Process Water Storage Tank	F5	N	Y	Y	C	0	75000	0	10.08	D	8.9 - 12	0.0000E+00	Y	Y

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Maintenance-Vessel/Tank Draining

eference Waste Stream I.D. #	Description of Waste Stream	Type of Waste Stream	Waste Stream Controlled for Benzene by Subpart FF	Waste Stream Hardpiped Between Two Subpart L Units	Water Content >10% (Y/N)	Determination Method: Water Content	# of Occurrences of Draining	Volume per Occurrence (gallons)	Annual Waste Quantity (gal)	Annual Average Flow Weighted Benzene Concentration (mg/l)	Determination Method: Benzene Concentration	Range of Benzene Concentration (mg/l)	Annual Benzene Quantity (Mg)	Return to Process (Y/N)	Tab Component (Y/N)
									163198			TAB	0.0415		

Reporting Year: 2006

ND - Not Determined

( ) - Indicates Higher Flow Weighted Benzene Conc. of two process streams present to calculate TAB

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Section 11
Miscellaneous

EPA-USS-0330969

aste Stream I.D. #	Description of Waste Stream	Type of Waste Stream	Waste Stream Controlled for Benzene by Subpart FF	Waste Stream Hardpiped Between Two Subpart L Units	Water Content >10% (Y/N)	Determination Method: Water Content	# of Occurrences	Volume per Occurrence (gallons)	Annual Waste Quantity (gal)	Annual Average Flow Weighted Benzene Concentration (mg/l)	Determination Method: Benzene Concentration (mg/l)	Range of Benzene Concentration (mg/l)	Annual Benzene Quantity (Mg)	Return to Process (Y/N)	Tab Componen t (Y/N)
154	Pump Room Floor Cleaning (Wash Down)	E2	N	N	Y	C	3	12000	36000	0.68	B	0.004 - 2.5	9.21613E-05	Y	Y
145	Truck Wash Truck Clean Out/Decontamination Water	G1	N	N	Y	C	3	50	150	2.95	D	0.01 - 15	1.67595E-06	Y	Y

Reporting Year: 2006

36150

TAB 0.0000938

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