MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D39041
Account: KPKCOD - K.P. Kauffmann Company, Inc.
Project: Wattenberg Tank

QC Batch ID: MP8490
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date:

Metal

(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

6.1.2
6

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D39041
Account: KPKCOD - K.P. Kauffmann Company, Inc.
Project: Wattenberg Tank

QC Batch ID: MP8490
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 09/26/12

Metal	D39061-1 Original	MSD	Spikelot ICPALL2	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic						
Barium						
Beryllium						
Boron						
Cadmium	anr					
Calcium	5260	32900	25000	110.6	0.0	20
Chromium						
Cobalt						
Copper	anr					
Iron						
Lead	anr					
Lithium						
Magnesium	1430	28000	25000	106.3	3.5	20
Manganese	anr					
Molybdenum						
Nickel						
Phosphorus						
Potassium	1660	29100	25000	109.8	4.0	20
Selenium						
Silicon						
Silver						
Sodium	3130	29800	25000	106.7	3.9	20
Strontium						
Thallium						
Tin						
Titanium						
Uranium						
Vanadium						
Zinc	anr					

Associated samples MP8490: D39041-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D39041
Account: KPKCOD - K.P. Kauffmann Company, Inc.
Project: Wattenberg Tank

QC Batch ID: MP8490
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date:

Metal

(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

6.1.2

6

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D39041
Account: KPKCOD - K.P. Kauffmann Company, Inc.
Project: Wattenberg Tank

QC Batch ID: MP8490
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 09/26/12

Metal	BSP Result	Spikelot ICPALL2	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Boron				
Cadmium	anr			
Calcium	27500	25000	110.0	80-120
Chromium				
Cobalt				
Copper	anr			
Iron				
Lead	anr			
Lithium				
Magnesium	26200	25000	104.8	80-120
Manganese	anr			
Molybdenum				
Nickel				
Phosphorus				
Potassium	27000	25000	108.0	80-120
Selenium				
Silicon				
Silver				
Sodium	26500	25000	106.0	80-120
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc	anr			

Associated samples MP8490: D39041-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D39041
Account: KPKCOD - K.P. Kauffmann Company, Inc.
Project: Wattenberg Tank

QC Batch ID: MP8490
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date:

Metal

(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: D39041
Account: KPKCOD - K.P. Kauffmann Company, Inc.
Project: Wattenberg Tank

QC Batch ID: MP8490
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 09/26/12

Metal	D39061-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic				
Barium				
Beryllium				
Boron				
Cadmium	anr			
Calcium	5260	5400	2.5	0-10
Chromium				
Cobalt				
Copper	anr			
Iron				
Lead	anr			
Lithium				
Magnesium	1430	1500	4.8	0-10
Manganese	anr			
Molybdenum				
Nickel				
Phosphorus				
Potassium	1660	1750	5.3	0-10
Selenium				
Silicon				
Silver				
Sodium	3130	3160	1.0	0-10
Strontium				
Thallium				
Tin				
Titanium				
Uranium				
Vanadium				
Zinc	anr			

Associated samples MP8490: D39041-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits

SERIAL DILUTION RESULTS SUMMARY

Login Number: D39041
Account: KPKCOD - K.P. Kauffmann Company, Inc.
Project: Wattenberg Tank

QC Batch ID: MP8490
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date:

Metal

(anr) Analyte not requested

9.1.4
6

Mountain States ACCUTEST LABORATORIES

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D39041
Account: KPKCOD - K.P. Kauffmann Company, Inc.
Project: Wattenberg Tank

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Chloride	GP8265/GN16916	0.50	0.0	mg/l	20	19.5	97.5	90-110%
Fluoride	GP8265/GN16916	0.10	0.0	mg/l	10	9.20	92.0	90-110%
HEM Oil and Grease	GP8362/GN17087	5.0	0.0	mg/l	40	34.6	86.5	78-114%
Nitrogen, Nitrate	GP8265/GN16916	0.010	0.0	mg/l	4.52	4.29	95.0	90-110%
Nitrogen, Nitrite	GP8265/GN16916	0.0040	0.0	mg/l	6.09	6.20	101.8	90-110%
Solids, Total Dissolved	GN16953	10	0.0	mg/l	400	395	98.8	90-110%
Sulfate	GP8265/GN16916	0.50	0.0	mg/l	30	28.7	95.7	90-110%
Total Organic Carbon	GP8320/GN17023	1.0	0.0	mg/l	8.82	8.75	99.2	90-110%
pH	GN16903			su	8.00	7.99	99.9	99.3-100.7%

Associated Samples:
Batch GP8265: D39041-1
Batch GP8320: D39041-1
Batch GP8362: D39041-1
Batch GN16903: D39041-1
Batch GN16953: D39041-1
(*) Outside of QC limits

7.1

7

BLANK SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D39041
Account: KPKCOD - K.P. Kauffmann Company, Inc.
Project: Wattenberg Tank

Analyte	Batch ID	Units	Spike Amount	BSD Result	RPD	QC Limit
HEM Oil and Grease	GP8362/GN17087	mg/l	40	34.7	0.3	20%

Associated Samples:
Batch GP8362: D39041-1
(*) Outside of QC limits

7.2 7

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D39041
Account: KPKCOD - K.P. Kauffmann Company, Inc.
Project: Wattenberg Tank

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Solids, Total Dissolved	GN16953	D39035-6	mg/l	86.0	86.0	0.0	0-25%
Total Organic Carbon	GP8320/GN17023	D39076-3	mg/l	11.9	12.3	3.3	0-20%

Associated Samples:
Batch GP8320: D39041-1
Batch GN16953: D39041-1
(*) Outside of QC limits

7.3

7

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D39041
Account: KPKCOD - K.P. Kauffmann Company, Inc.
Project: Wattenberg Tank

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chloride	GP8265/GN16916	D39063-1	mg/l	1.5	10	11.2	97.0	80-120%
Fluoride	GP8265/GN16916	D39063-1	mg/l	0.065	2.5	2.4	93.4	80-120%
HEM Oil and Grease	GP8362/GN17087	D39049-1	mg/l	3.8	40	35.2	78.5	78-114%
Nitrogen, Nitrate	GP8265/GN16916	D39063-1	mg/l	0.059	0.565	0.60	95.8	80-120%
Nitrogen, Nitrite	GP8265/GN16916	D39063-1	mg/l	0.0	0.305	0.30	98.5	80-120%
Sulfate	GP8265/GN16916	D39063-1	mg/l	4.4	10	14.2	98.0	80-120%
Total Organic Carbon	GP8320/GN17023	D39076-1	mg/l	1.2	10	12.1	109.0	80-120%

Associated Samples:
Batch GP8265: D39041-1
Batch GP8320: D39041-1
Batch GP8362: D39041-1
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

7.4
7

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D39041
Account: KPKCOD - K.P. Kauffmann Company, Inc.
Project: Wattenberg Tank

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Chloride	GP8265/GN16916	D39063-1	mg/l	1.5	10	11.2	0.0	20%
Fluoride	GP8265/GN16916	D39063-1	mg/l	0.065	2.5	2.4	0.0	20%
Nitrogen, Nitrate	GP8265/GN16916	D39063-1	mg/l	0.059	0.565	0.60	0.0	20%
Nitrogen, Nitrite	GP8265/GN16916	D39063-1	mg/l	0.0	0.305	0.30	0.0	20%
Sulfate	GP8265/GN16916	D39063-1	mg/l	4.4	10	14.2	0.0	20%
Total Organic Carbon	GP8320/GN17023	D39076-1	mg/l	1.2	10	12.2	0.8	20%

Associated Samples:
Batch GP8265: D39041-1
Batch GP8320: D39041-1
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

7.5
7

Mountain States ACCUTEST LABORATORIES

08/14/12

Technical Report for

K.P. Kauffmann Company, Inc.

Wattenberg Tank

Accutest Job Number: D36884

Sampling Date: 07/31/12

Report to:

Apex Consulting Services
PO Box 369
Louisville, CO 80027-0369
mhattel@msn.com; slaramesa@kpk.com

ATTN: Mike Hattel

Total number of pages in report: 29

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Brad Madadian
Laboratory Director

Client Service contact: Shea Greiner 303-425-6021

Certifications: CO, ID, NE, NM, ND (R-027) (PW), UT (NELAP CO00049), TX (T104704511-12-1)

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Test results relate only to samples analyzed.

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Sample Summary

K.P. Kauffmann Company, Inc.

Job No: D36884

Wattenberg Tank

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
D36884-1	07/31/12	08:30 MH	07/31/12	AQ	Water	TANK-I
D36884-1F	07/31/12	08:30 MH	07/31/12	AQ	Water Filtered	TANK-I

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	K.P. Kauffmann Company, Inc.	Job No	D36884
Site:	Wattenberg Tank	Report Date	8/14/2012 3:16:40 PM

On 07/31/2012, 1 sample(s), 0 Trip Blank(s), and 0 Field Blank(s) were received at Accutest Mountain States (AMS) at a temperature of 2.2 °C. The samples were intact and properly preserved, unless noted below. An AMS Job Number of D36884 was assigned to the project. The lab sample ID, client sample ID, and date of sample collection are detailed in the report's Results Summary.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Metals By Method SW846 6010C

Matrix AQ Batch ID: MP8044

- All samples were digested and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D36951-1MS, D36951-1MSD, D36951-1SDL were used as the QC samples for the metals analysis.

Wet Chemistry By Method ASTM D287

Matrix ALL Batch ID: GN16225

- The data for ASTM D287 meets quality control requirements.

Wet Chemistry By Method EPA 1664A

Matrix AQ Batch ID: GP7941

- All samples were prepared and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D36884-1MS were used as the QC samples for the HEM Oil and Grease analysis.
- The matrix spike (MS) recovery(s) of HEM Oil and Grease are outside control limits. Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

Wet Chemistry By Method EPA 300/SW846 9056

Matrix AQ Batch ID: GP7841

- All samples were prepared and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D36877-1MS, D36877-1MSD were used as the QC samples for the Chloride, Nitrogen, Nitrate, Nitrogen, Nitrite, Sulfate, Chloride analysis.
- D36884-1 for Nitrogen, Nitrite: Elevated detection limit due to matrix interference.

Wet Chemistry By Method SM20 2540C

Matrix AQ Batch ID: GN16077

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D36826-3DUP were used as the QC samples for the Solids, Total Dissolved analysis.

Wet Chemistry By Method SM20 4500H B+

Matrix AQ	Batch ID: GN16086

- D36884-1 for pH: Analysis performed past the required 15 minutes from collection time/holding time.

Wet Chemistry By Method SM20 5310B

Matrix AQ	Batch ID: GP7870

- All samples were prepared and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D36829-2DUP, D37066-1MS, D37066-1MSD were used as the QC samples for the Total Organic Carbon analysis.

AMS certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting AMS's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

AMS is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. This report is authorized by AMS indicated via signature on the report cover.

Summary of Hits

Job Number: D36884
Account: K.P. Kauffmann Company, Inc.
Project: Wattenberg Tank
Collected: 07/31/12

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
D36884-1	**TANK-I**					
Chloride		9970	250	100	mg/l	EPA 300/SW846 9056
HEM Oil and Grease		150	4.8	2.6	mg/l	EPA 1664A
Nitrogen, Nitrate		1.3	1.1	0.55	mg/l	EPA 300/SW846 9056
Solids, Total Dissolved		16500	10	5.0	mg/l	SM20 2540C
Specific Gravity by Hydrometer		1.0075				ASTM D287
Sulfate		196	13	5.0	mg/l	EPA 300/SW846 9056
Total Organic Carbon		4330	230	110	mg/l	SM20 5310B
pH [a]		8.68			su	SM20 4500H B+
D36884-1F	**TANK-I**					
Calcium		59200	20000	370	ug/l	SW846 6010C
Magnesium		30000	10000	550	ug/l	SW846 6010C
Potassium		178000	50000	3100	ug/l	SW846 6010C
Sodium		5060000	4000	980	ug/l	SW846 6010C

(a) Analysis performed past the required 15 minutes from collection time/holding time.

Mountain States ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Accutest Laboratories

Report of Analysis

Client Sample ID:	TANK-I		
Lab Sample ID:	D36884-1	**Date Sampled:**	07/31/12
Matrix:	AQ - Water	**Date Received:**	07/31/12
		Percent Solids:	n/a
Project:	Wattenberg Tank		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	9970	250	mg/l	500	07/31/12 18:06	JML	EPA 300/SW846 9056
HEM Oil and Grease	150	4.8	mg/l	1	08/14/12	SWT	EPA 1664A
Nitrogen, Nitrate	1.3	1.1	mg/l	25	07/31/12 12:06	JML	EPA 300/SW846 9056
Nitrogen, Nitrite [a]	< 5.0	5.0	mg/l	500	07/31/12 18:06	JML	EPA 300/SW846 9056
Solids, Total Dissolved	16500	10	mg/l	1	07/31/12	JD	SM20 2540C
Specific Gravity by Hydromete	1.0075			1	08/09/12	MM	ASTM D287
Sulfate	196	13	mg/l	25	07/31/12 12:06	JML	EPA 300/SW846 9056
Total Organic Carbon	4330	230	mg/l	227	08/06/12 12:33	NS	SM20 5310B
pH [b]	8.68		su	1	07/31/12 11:45	CT	SM20 4500H B+

(a) Elevated detection limit due to matrix interference.
(b) Analysis performed past the required 15 minutes from collection time/holding time.

RL = Reporting Limit

Accutest Laboratories

Report of Analysis

Client Sample ID:	TANK-I		
Lab Sample ID:	D36884-1F	**Date Sampled:**	07/31/12
Matrix:	AQ - Water Filtered	**Date Received:**	07/31/12
		Percent Solids:	n/a
Project:	Wattenberg Tank		

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Calcium	59200	20000	ug/l	5	08/02/12	08/04/12	JM	SW846 6010C [1]	SW846 3010A [3]
Magnesium	30000	10000	ug/l	5	08/02/12	08/04/12	JM	SW846 6010C [1]	SW846 3010A [3]
Potassium	178000	50000	ug/l	5	08/02/12	08/04/12	JM	SW846 6010C [1]	SW846 3010A [3]
Sodium	5060000	4000	ug/l	1	08/02/12	08/07/12	JB	SW846 6010C [2]	SW846 3010A [3]

(1) Instrument QC Batch: MA2681
(2) Instrument QC Batch: MA2688
(3) Prep QC Batch: MP8044

RL = Reporting Limit

Mountain States ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

CHAIN OF CUSTODY

4036 Youngfield St. Wheat Ridge, CO 80033
303-425-6021 FAX 303-425-6854

FED-EX Tracking #:
Bottle Order Control #:
Accutest Quote #:
Accutest Job #: 36884

Client / Reporting Information

Company Name: K.P. Kauffman Company, Inc.
Address: 1675 Broadway, Suite 2800
City: Denver State: CO Zip: 80202-4628
Project Contact: Susan Lara-Mesa SLaraMesa@kpk.com
Phone #: 303-825-4822
Samplers's Name: MICHAEL HATTEL (303-665-1400)

Project Information

Project Name: WATTENBERG TANK
Street:
City: Fort Lupton State: CO
Project #:
Fax #:
Client Purchase Order #: 7591

Accutest Sample #	Field ID / Point of Collection	SUMMA # MEOH Vial #	Collection Date	Time	Sampled By	Matrix	# of bottles	HCl	MEOH	HNO3	H2SO4	NONE	Na2S2O3	MEOH	ENCORE	OIL & GREASE 1664	ANIONS (NITRATE, NITRITE, SULFATE, CHLORIDE)	pH	CATIONS (Ca, K, Mg, NA)	SPECIFIC GRAVITY	TDS	TOC					LAB USE ONLY
	TANK - I		7/31/12	0830	MDH	LIQ	7	X			X					X	X	X	X	X	X	X						0
																											DR 7/31

Requested Analysis

Matrix Codes: DW- Drinking Water; GW- Ground Water; WW- Water; SW- Surface Water; SO- Soil; SL-Sludge; OI-Oil; LIQ- Other Liquid; AIR- Air; SOL-Other Solid; WP-Wipe

Turnaround Time (Business days)

- [X] Std. 10 Business Days
- [ ]
- [ ]
- [ ]
- [ ]
- [ ]
- [ ]

Approved By:/ Date:

Emergency T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A"
- [ ] Commercial "B"
- [ ] NJ Reduced
- [ ] NJ Full
- [x] Hard Copy
- [ ] FULL CLP
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [x] PDF

Comments / Remarks

NO Hard Copy

PDF copy to Mike Hattel with APEX at mhattel@msn.com

PDF copy to Susana Lara-Mesa w KPK at SLaraMesa@kpk.com

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished By Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	7/31/12 1005	1	2		2 7/31/12
Relinquished by: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal # HD	Preserved where applicable X	On Ice X Cooler Temp. 2.2°

D36884: Chain of Custody
Page 1 of 2

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: D36884 | Client: KP KAUFFMAN COMPANY, INC. | Immediate Client Services Action Required: No

Date / Time Received: 7/31/2012 10:05:00 AM | No. Coolers: 1 | Client Service Action Required at Login: No

Project: WATTENBERG TANK | Airbill #'s:

Cooler Security	Y	or N		Y	or N
1. Custody Seals Present:	☑	☐	3. COC Present:	☑	☐
2. Custody Seals Intact:	☑	☐	4. Smpl Dates/Time OK	☑	☐

Cooler Temperature	Y	or N
1. Temp criteria achieved:	☑	☐
2. Cooler temp verification:	Infared gun	
3. Cooler media:	Ice (bag)	

Quality Control Preservation	Y	or N	N/A
1. Trip Blank present / cooler:	☐	☐	
2. Trip Blank listed on COC:	☐	☐	
3. Samples preserved properly:	☑	☐	
4. VOCs headspace free:	☐	☐	☑

Sample Integrity - Documentation	Y	or N
1. Sample labels present on bottles:	☑	☐
2. Container labeling complete:	☑	☐
3. Sample container label / COC agree:	☑	☐

Sample Integrity - Condition	Y	or N
1. Sample recvd within HT:	☑	☐
2. All containers accounted for:	☑	☐
3. Condition of sample:	Intact	

Sample Integrity - Instructions	Y	or N	N/A
1. Analysis requested is clear:	☑	☐	
2. Bottles received for unspecified tests	☐	☑	
3. Sufficient volume rec'd for analysis:	☑	☐	
4. Compositing instructions clear:	☐	☐	☑
5. Filtering instructions clear:	☐	☐	☑

Comments

Accutest Laboratories
V:(303) 425-6021
4036 Youngfield Street
F: (303) 425-6854
Wheat Ridge, CO
www/accutest.com

5.1

5

D36884: Chain of Custody
Page 2 of 2

Mountain States ACCUTEST LABORATORIES

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: D36884
Account: KPKCOD - K.P. Kauffmann Company, Inc.
Project: Wattenberg Tank

QC Batch ID: MP8044 | Methods: SW846 6010C
Matrix Type: AQUEOUS | Units: ug/l

Prep Date: 08/02/12

Metal	RL	IDL	MDL	MB raw	final
Aluminum	100	9.6	21		
Antimony	30	1.7	3.2		
Arsenic	25	4.4	7.6		
Barium	10	.1	.5		
Beryllium	10	1.3	3.1		
Boron	50	1	2.6		
Cadmium	10	.6	.59		
Calcium	400	5.4	7.3	7.4	<400
Chromium	10	.3	.39		
Cobalt	5.0	.4	.4		
Copper	10	1.2	3		
Iron	70	1.2	19		
Lead	50	1.9	2.9		
Lithium	2.0	.5	.65		
Magnesium	200	6.5	11	0.50	<200
Manganese	5.0	1.2	1.8		
Molybdenum	10	2.1	2.1		
Nickel	30	.5	.53		
Phosphorus	100	14	59		
Potassium	1000	61	61	46.4	<1000
Selenium	50	4.8	5.7		
Silicon	50	2.9	2.1		
Silver	30	.4	.65		
Sodium	400	5.9	98	-110	<400
Strontium	5.0	.04	1.5		
Thallium	10	2.9	3		
Tin	50	12	24		
Titanium	10	.1	1.2		
Uranium	50	2.2	2.2		
Vanadium	10	.2	.39		
Zinc	30	.5	1.5		

Associated samples MP8044: D36884-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: D36884
Account: KPKCOD - K.P. Kauffmann Company, Inc.
Project: Wattenberg Tank

QC Batch ID: MP8044
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date:

Metal

(anr) Analyte not requested

6.1.1

6

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D36884
Account: KPKCOD - K.P. Kauffmann Company, Inc.
Project: Wattenberg Tank

QC Batch ID: MP8044
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 08/02/12

Metal	D36951-1 Original	MS	Spikelot ICPALL2	% Rec	QC Limits
Aluminum	anr				
Antimony	anr				
Arsenic	anr				
Barium	anr				
Beryllium	anr				
Boron					
Cadmium	anr				
Calcium	43700	71000	25000	109.2	75-125
Chromium	anr				
Cobalt	anr				
Copper	anr				
Iron	anr				
Lead	anr				
Lithium					
Magnesium	6680	32400	25000	102.9	75-125
Manganese	anr				
Molybdenum					
Nickel	anr				
Phosphorus					
Potassium	5290	30700	25000	101.6	75-125
Selenium	anr				
Silicon					
Silver	anr				
Sodium	9270	35400	25000	104.1	75-125
Strontium					
Thallium	anr				
Tin					
Titanium					
Uranium					
Vanadium	anr				
Zinc	anr				

Associated samples MP8044: D36884-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D36884
Account: KPKCOD - K.P. Kauffmann Company, Inc.
Project: Wattenberg Tank

QC Batch ID: MP8044
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date:

Metal

(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

6.1.2
6

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D36884
Account: KPKCOD - K.P. Kauffmann Company, Inc.
Project: Wattenberg Tank

QC Batch ID: MP8044
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 08/02/12

Metal	D36951-1 Original	MSD	Spikelot ICPALL2	% Rec	MSD RPD	QC Limit
Aluminum	anr					
Antimony	anr					
Arsenic	anr					
Barium	anr					
Beryllium	anr					
Boron						
Cadmium	anr					
Calcium	43700	70500	25000	107.2	0.7	20
Chromium	anr					
Cobalt	anr					
Copper	anr					
Iron	anr					
Lead	anr					
Lithium						
Magnesium	6680	33600	25000	107.7	3.6	20
Manganese	anr					
Molybdenum						
Nickel	anr					
Phosphorus						
Potassium	5290	31900	25000	106.4	3.8	20
Selenium	anr					
Silicon						
Silver	anr					
Sodium	9270	34800	25000	101.7	1.7	20
Strontium						
Thallium	anr					
Tin						
Titanium						
Uranium						
Vanadium	anr					
Zinc	anr					

Associated samples MP8044: D36884-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: D36884
Account: KPKCOD - K.P. Kauffmann Company, Inc.
Project: Wattenberg Tank

QC Batch ID: MP8044
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date:

Metal

(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

6.12
6

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D36884
Account: KPKCOD - K.P. Kauffmann Company, Inc.
Project: Wattenberg Tank

QC Batch ID: MP8044
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 08/02/12

Metal	BSP Result	Spikelot ICPALL2	% Rec	QC Limits
Aluminum	anr			
Antimony	anr			
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Boron				
Cadmium	anr			
Calcium	26700	25000	106.8	80-120
Chromium	anr			
Cobalt	anr			
Copper	anr			
Iron	anr			
Lead	anr			
Lithium				
Magnesium	25100	25000	100.4	80-120
Manganese	anr			
Molybdenum				
Nickel	anr			
Phosphorus				
Potassium	25300	25000	101.2	80-120
Selenium	anr			
Silicon				
Silver	anr			
Sodium	25700	25000	102.8	80-120
Strontium				
Thallium	anr			
Tin				
Titanium				
Uranium				
Vanadium	anr			
Zinc	anr			

Associated samples MP8044: D36884-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: D36884
Account: KPKCOD - K.P. Kauffmann Company, Inc.
Project: Wattenberg Tank

QC Batch ID: MP8044
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date:

Metal

(anr) Analyte not requested

6.13

ACCUTEST LABORATORIES
D36884

SERIAL DILUTION RESULTS SUMMARY

Login Number: D36884
Account: KPKCOD - K.P. Kauffmann Company, Inc.
Project: Wattenberg Tank

QC Batch ID: MP8044
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date: 08/02/12

Metal	D36951-1 Original	SDL 1:5	%DIF	QC Limits
Aluminum	anr			
Antimony	anr			
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Boron				
Cadmium	anr			
Calcium	43700	45800	4.8	0-10
Chromium	anr			
Cobalt	anr			
Copper	anr			
Iron	anr			
Lead	anr			
Lithium				
Magnesium	6680	6820	2.0	0-10
Manganese	anr			
Molybdenum				
Nickel	anr			
Phosphorus				
Potassium	5290	5800	9.5	0-10
Selenium	anr			
Silicon				
Silver	anr			
Sodium	9270	9370	0.0	0-10
Strontium				
Thallium	anr			
Tin				
Titanium				
Uranium				
Vanadium	anr			
Zinc	anr			

Associated samples MP8044: D36884-1F

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits

SERIAL DILUTION RESULTS SUMMARY

Login Number: D36884
Account: KPKCOD - K.P. Kauffmann Company, Inc.
Project: Wattenberg Tank

QC Batch ID: MP8044
Matrix Type: AQUEOUS

Methods: SW846 6010C
Units: ug/l

Prep Date:

Metal

(anr) Analyte not requested

6.1.4

6

Mountain States ACCUTEST LABORATORIES

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D36884
Account: KPKCOD - K.P. Kauffmann Company, Inc.
Project: Wattenberg Tank

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Bromide	GP7841/GN16107	0.20	0.0	mg/l	20	20.1	100.5	90-110%
Chloride	GP7841/GN16107	0.50	0.31	mg/l	20	20.7	103.5	90-110%
HEM Oil and Grease	GP7941/GN16288	5.0	0.0	mg/l	40	38.5	96.3	78-114%
Nitrogen, Nitrate	GP7841/GN16107	0.045	0.0	mg/l	4.52	4.33	95.8	90-110%
Nitrogen, Nitrite	GP7841/GN16107	0.010	0.0	mg/l	6.09	6.34	104.1	90-110%
Solids, Total Dissolved	GN16077	10	0.0	mg/l	400	402	100.5	90-110%
Sulfate	GP7841/GN16107	0.50	0.0	mg/l	30	29.4	98.0	90-110%
Total Organic Carbon	GP7870/GN16172	1.0	0.0	mg/l	8.82	8.19	92.9	90-110%
pH	GN16086			su	8.00	7.96	99.5	99.3-100.7%

Associated Samples:
Batch GN16077: D36884-1
Batch GN16086: D36884-1
Batch GP7841: D36884-1
Batch GP7870: D36884-1
Batch GP7941: D36884-1
(*) Outside of QC limits

BLANK SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D36884
Account: KPKCOD - K.P. Kauffmann Company, Inc.
Project: Wattenberg Tank

Analyte	Batch ID	Units	Spike Amount	BSD Result	RPD	QC Limit
HEM Oil and Grease	GP7941/GN16288	mg/l	40	36.9	4.2	20%

Associated Samples:
Batch GP7941: D36884-1
(*) Outside of QC limits

7.2

7

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D36884
Account: KPKCOD - K.P. Kauffmann Company, Inc.
Project: Wattenberg Tank

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Solids, Total Dissolved	GN16077	D36826-3	mg/l	4780	4820	0.8	0-25%
Total Organic Carbon	GP7870/GN16172	D36829-2	mg/l	118	115	2.6	0-20%

Associated Samples:
Batch GN16077: D36884-1
Batch GP7870: D36884-1
(*) Outside of QC limits

7.3

7

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D36884
Account: KPKCOD - K.P. Kauffmann Company, Inc.
Project: Wattenberg Tank

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Bromide	GP7841/GN16107	D36877-1	mg/l	0.33	5	5.3	99.4	80-120%
Chloride	GP7841/GN16107	D36877-1	mg/l	30.9	20	51.1	101.0	80-120%
HEM Oil and Grease	GP7941/GN16288	D36884-1	mg/l	150	40	207	142.5N(a)	78-114%
Nitrogen, Nitrate	GP7841/GN16107	D36877-1	mg/l	0.15	1.13	1.2	92.9	80-120%
Nitrogen, Nitrite	GP7841/GN16107	D36877-1	mg/l	0.0	0.609	0.57	93.6	80-120%
Sulfate	GP7841/GN16107	D36877-1	mg/l	168	100	256	88.0	80-120%
Total Organic Carbon	GP7870/GN16172	D37066-1	mg/l	192	200	383	95.5	80-120%

Associated Samples:
Batch GP7841: D36884-1
Batch GP7870: D36884-1
Batch GP7941: D36884-1
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

7.4
7

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D36884
Account: KPKCOD - K.P. Kauffmann Company, Inc.
Project: Wattenberg Tank

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Bromide	GP7841/GN16107	D36877-1	mg/l	0.33	5	5.4	1.9	20%
Chloride	GP7841/GN16107	D36877-1	mg/l	30.9	20	51.3	0.4	20%
Nitrogen, Nitrate	GP7841/GN16107	D36877-1	mg/l	0.15	1.13	1.3	8.0	20%
Nitrogen, Nitrite	GP7841/GN16107	D36877-1	mg/l	0.0	0.609	0.58	1.7	20%
Sulfate	GP7841/GN16107	D36877-1	mg/l	168	100	258	0.8	20%
Total Organic Carbon	GP7870/GN16172	D37066-1	mg/l	192	200	383	0.0	20%

Associated Samples:
Batch GP7841: D36884-1
Batch GP7870: D36884-1
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

7.5
7

LEASE #	LEASE NAME	DATE 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	LEASE TOTALS
60003	1415 CORPORATION C																												35				35
60002	1415 CORPORATION B																				23												23
60093	1415 CORPORATION G																				22												22
61864	AMOCO-CHARTER-SCHNEI									22						37																	59
61883	AMOCO CHART SCHNEIDER A									21						36																	57
61902	AMOCO CHART SCHNEIDER B									22						37																	59
58368	AMOCO-ENERGY-SMITS U						20								30							30											80
17450	ANDERSON		18							17																				30			65
58425	BELL UNIT, *CHARLES								30													30							40			33	133
58406	BELL, *CHARLES C								30													30							40			32	132
59850B	BERGER, *JACK & BERG								45						40																		85
61186	BURKHARDT SELTZER		20																										35				55
60113	CAMENISCH 1																														60		60
17451	CARTER 21-33																												130				130
58463	CHRISTENSEN UNIT, *N						17															20											37
58444	CHRISTENSEN, *NELS						18															20											38
6825	CHURCH 7-A 31-2								60																								60
09163	COBURN CLEMENTINE 1																17																17
09593	COBURN CLEMENTINE B1																18																18
58462	DAMIANA, *JAMES A						30																										30
60040	DEEPE C, *CARL R		40													45																	85
07895	DEVORE 1, 2		8														11															9	28
07896	DEVORE 2		9														12															8	29
09272	DEVORE 3, 4		9														11															9	29
09271	DEVORE 4		9														11															9	29
07886	DUTCHER B 1														16																	20	36
08945	DUTCHER B 2														17																	20	37
08684	DUTCHER C 1														16																	20	36
08899	DUTCHER C 2														16																	20	36
67144	ED KAM 4-33		30																														30
23829	ELAINE		17																														17
08391	ELKHORN CO B3										7														7								14
08694	ELKHORN CO B5										8														7								15
09488	ELKHORN CO B6										7														7								14
09489	ELKHORN CO B7										8														6								14
09490	ELKHORN CO B8										7														6								13
09491	ELKHORN CO B9										8														7								15
16081	EWING 23-30														40															40			80
00001	FACILITY 1							50						80		20					75			50				130					405
00002	FACILITY 2						100	130									80					260	130						40		130		870
00003	FACILITY 3		30																		70												100
00004	FACILITY 4	130					70	160								45		270					130	130	35					40			1010
00005	FACILITY 5		25											130							100			130								70	455
00006	FACILITY 6		25																		35									45	40		145
00007	FACILITY 7		130												160																	70	360
00008	FACILITY 8										80											130	55										265
004WA	FACILITY 4WA													50		25								130									205
004WB	FACILITY 4WB													110											80								190
59269	FIRECRACKER	65						50							80																	60	255
62016	FRISBEE																						100										100
32762	FRONT RANGE 11-17-7																								65			130	670	130			995
32755	FRONT RANGE 11-17-8			470			190								130										65			130				520	1505
25792	FRONT RANGE 11-17-11		30						55																								85
62608	GENESIS 1							60		60								60															180
07887	GERHARDT GEORGE H 1																															11	11
08124	GERHARDT GEORGE H 2																															12	12
08946	GERHARDT GEORGE H 3																															11	11
13577	GERHARDT GEORGE H 4																															11	11
60135	GERHARDT MARIE B																								45								45
59839	GRANT #'S 1,2,3,4																							40									40
61484	GUILDNER																													35			35
5869	GUTHRIE 1 & 2							45						45				30						35					40			40	235
60211	HANKS																35																35
60249	HART UNIT B, MARTIN																											35					35
60268	HART UNIT D																						110										110
59033	HAUDRICH #1 & 2						50								40															60			150
1900	HAUGEN																						50										50
62020	HEIN 1-2																	30												20			50
60290	HERMAN UNIT B, *ALFR						20																	25									45
58505	HERMAN UNIT, *ALFRED						20																	25									45
56134	HILL 3-10																													13			13
56176	HILL 4-10																													12			12
58501	HLADKY-O'GORMAN							20							15													12				8	55
60310	HORST B, JOHN 1 & 2															13														20			33
04200	HORTH R1-R2							20														20										30	70
2199	HOSMER 4-4																				85												85
66583	JEFFERS A							80																									80
59592	JOHNSON #'S 1 & 2									25																							25
08680	JOHNSON ROLAND 1																											25					25
08896	JOHNSON ROLAND B-1																											25					25
16057	KOCH 41-6																				18												18
09204	KOCH, KEN																				17												17
29642	KOESTER 18-33		130	50																		260						50					490

29643	KOESTER 18-33-6													166																			166
29605	KOESTER 18-33-4																								40								40
29606	KOESTER 3-33-3	65																															65
30329	KOESTER 3-33-29																220	390	260		650	130		130				30			240		2050
6080	KORTUM 2 A																40												35				75
16116	KUNZMAN 43-6								5																8								13
07666	KUNZMAN JOHN A #1								5																7								12
09296	KUNZMAN 2								5																8								13
09719	KUNZMAN 4								5																7								12
09653	LANSDOWN 1						10																										10
07348	LANSDOWN WM D 1						10																										10
10437	LANSDOWN WM D UNIT D1																37																37
59831	LANSON'S FARM 1-16							70																90								90	250
16883	LEGG 14-22																38																38
56138	LOEFFLER 1-18														40										30								70
67150	LOEFFLER 2-24																								30								30
61685	MARCUS 1																											30					30
56144	MATSUSHIMA 1-5																						40										40
23517	MATSUSHIMA 2-8X																						40										40
68429	MAUL 20-2													30																			30
07881	MCCOY PHILLIP #1									18																							18
59071	MCCRUMB #'S 1 & 2									30														35									65
23687	MCQUEARY 1		18																														18
61487	MEREDITH								60								40																100
8644	MILLARD 1			20																			18										38
10548	MILLARD 2			20																			17										37
58709	MILLER 13-5			17												12								15								22	66
68278	MILLER B #14, *CARL			16												11								15								22	64
60559	MILLER E #1, *CARL A			17												12								15								21	65
6436	MITCHELL 32-3	50					30							40							40				25						20		205
6440	MITCHELL 32-7								45																						40		85
6442	MITCHELL 32-8	35																															35
62296	MONFORT 2-30			40																								30					70
6352	MURPHY 5-2			30					25						30										50						25		160
7112	MURPHY 11-5	40					15																										55
6336	MURPHY 31-3								110							60														95			265
69075A	MUSICK 2-4-7									20														30								15	65
69075B	MUSICK 3-5									30														25									55
32872	NRC 9-9-15H	100		40			80		95	45				80			80	40			80		55		50			75					620
6119	NEWLANDER																						35										35
08985	PREM TURKEY FARMS B2																													7			7
07876	PREM TURKEY FARMS C1																													6			6
08943	PREM TURKEY FARMS C2																													7			7
259619	ROCKY MOUNTAIN FUEL 9-8																				37												37
68126	ROCKY MTN FUEL CO C 4, 10																				38												38
6377	ROSENFIELD 6-1			30																					20								50
6381	ROSENFIELD 6-5						25																										25
60790	SCHUTT, MARVIN E 1															12														20			32
61188	SELTZER 1A			20												20																	40
15997	SHANNON 24-30														40															40			80
60800	SICKLER, SHELDON 1 T																						80						70				150
12602	SPRAGUE A M A 1		17						18																					30			65
6515	STATE 14-32			10				43		27				30							30	15							27		43		225
6741	STATE 14			10				44		26				30							30	15							26		44		225
6746	STATE 14-31			10				43		27				30							30	15							27		43		225
50819A	STREAR, *SIDNEY														33													33					66
60820	STREAR														32													32					64
60838	SUCKLA A UNIT 1&2							13															10		13								36
60895	SUCKLA D UNIT 1&2							14															10		14								38
60952	SUCKLA FARMS C 2&3							13															10		13								36
60933	SUCKLA BROWN 17																							35									35
35080	SUNMARKE 19-28-11																	90										110			390		590
58653	TWOMBLEY B, *MARGARE																25													40			65
2090B	UPRR 23 D 2																														25		25
2091B	UPRR 23 D4																														20		20
61070	UPRR 42 PAN AM AF 1,																											60					60
61008	UPRR 42 D													100			130							75								50	355
58691	UPRR 42 PAN AM K						20																						35				55
61067	UPRR 43 PAN AM I																															50	50
62130	WAGNER #1								8												45							15				14	82
61719	WAGNER #1B								9																			15				13	37
62131	WAGNER #'S 1A & 2A								18																							13	31
61095	WALKING, *CARY							20							15													13				7	55
15925	WOOLEY 13-14									17																							17
66995	WUERTZ 12-3																		40		45	15			35			25					160
61142	YURK																								60								60
	TOTALS	485	565	800	0	0	725	875	290	505	365	0	0	921	790	385	805	910	300	0	1470	990	690	1030	740	0	0	1005	1250	690	1120	1340	
																																	19246
																																	19246

ASE #	LEASE NAME	DATE 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	LEASE TOTALS
																																	0
																																	0
	ANGI ALLES RECEIVER																																0
18	BERTHOUD BOOSTER																																0
	CDP 7 RECEIVER																																0
12	EATON PLANT																																0
33	ENTERPRISE BOOSTER																																0
09	GREELEY OFFICE																																0
11	GREELEY PLANT																																0
	JODY BOOSTER																																0
18	JOHNSTOWN BOOSTER																																0
34	KRAUTHEAD																																0
13	LUCERNE PLANT																																0
	MARIA BOOSTER																																0
18	MARILYN BOOSTER																																0
18	MARTHA BOOSTER																																0
14	MEWBOURN PLANT																																0
	MID POINT BOOSTER																																0
	PARKER PARSLEY BOOSTER																																0
92	PLATTEVILLE PLANT																																0
	REINICK RECEIVER																																0
35	RIVERSIDE BOOSTER																																0
32	ROGGEN FIELD																																0
31	ROGGEN PLANT		240				240			220					220						240											240	1400
18	SINGLETREE BOOSTER																																0
	SOUTHFIELD BOOSTER																																0
10	SPINDLE PLANT																																0
18	SURREY BOOSTER																																0
36	TAMPA																																0
23	WELD BOOSTERS																																0
17	WELD FIELD																																0
95	WELD MEASUREMENT																																0
18	WEST SPINDLE BOOSTER																																
																																	0
	TOTAL	0	240	0	0	0	240	0	0	220	0	0	0	0	220	0	0	0	0	0	240	0	0	0	0	0	0	0	0	0	0	240	1400
																																	1400

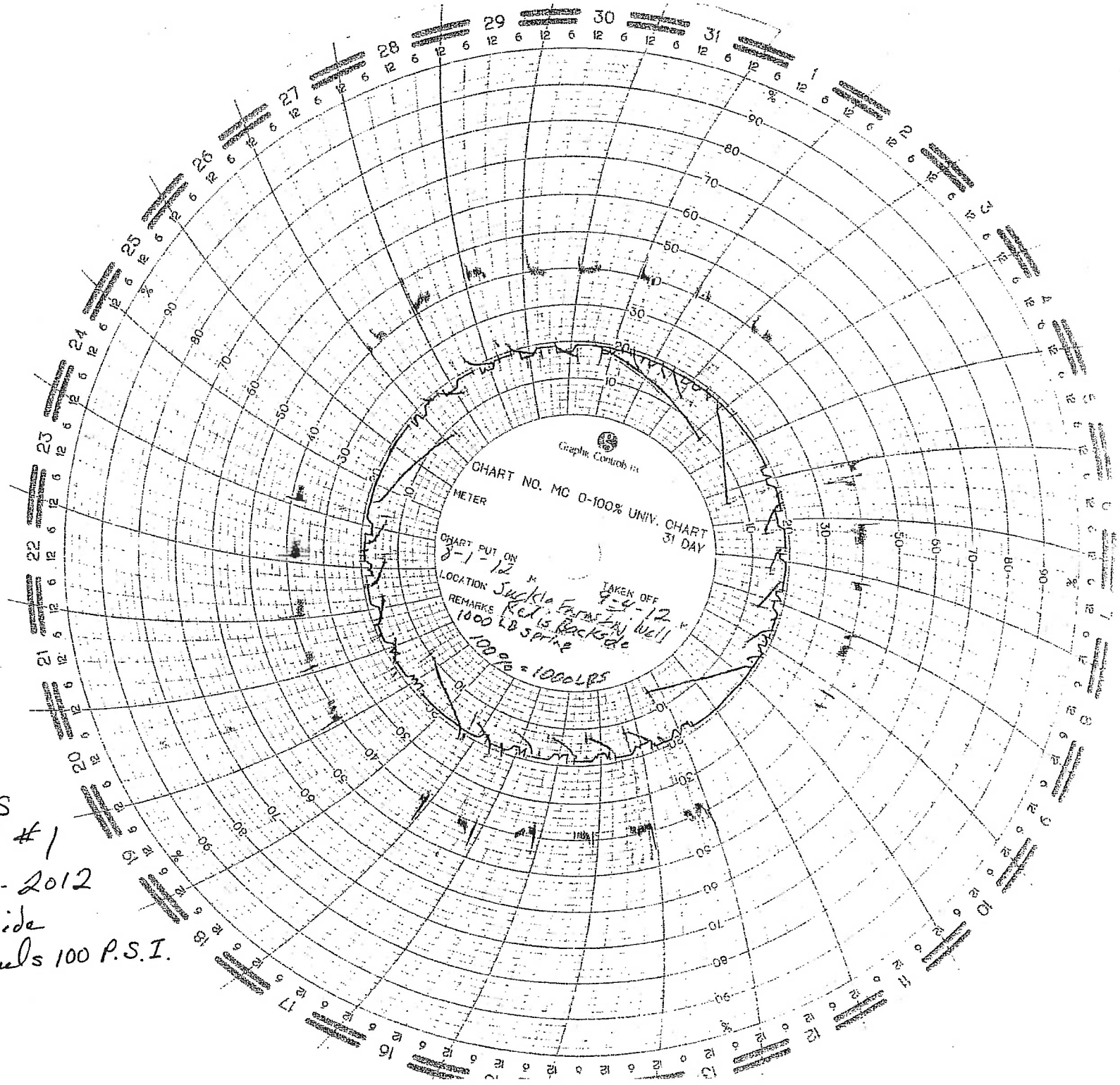
August 2012

SE #	LEASE NAME	DATE 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	LEASE TOTALS
																																	30
	KPK/KWS Wash Bay								30																								0
	TOTAL	0	0	0	0	0	0	0	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30
																																	30

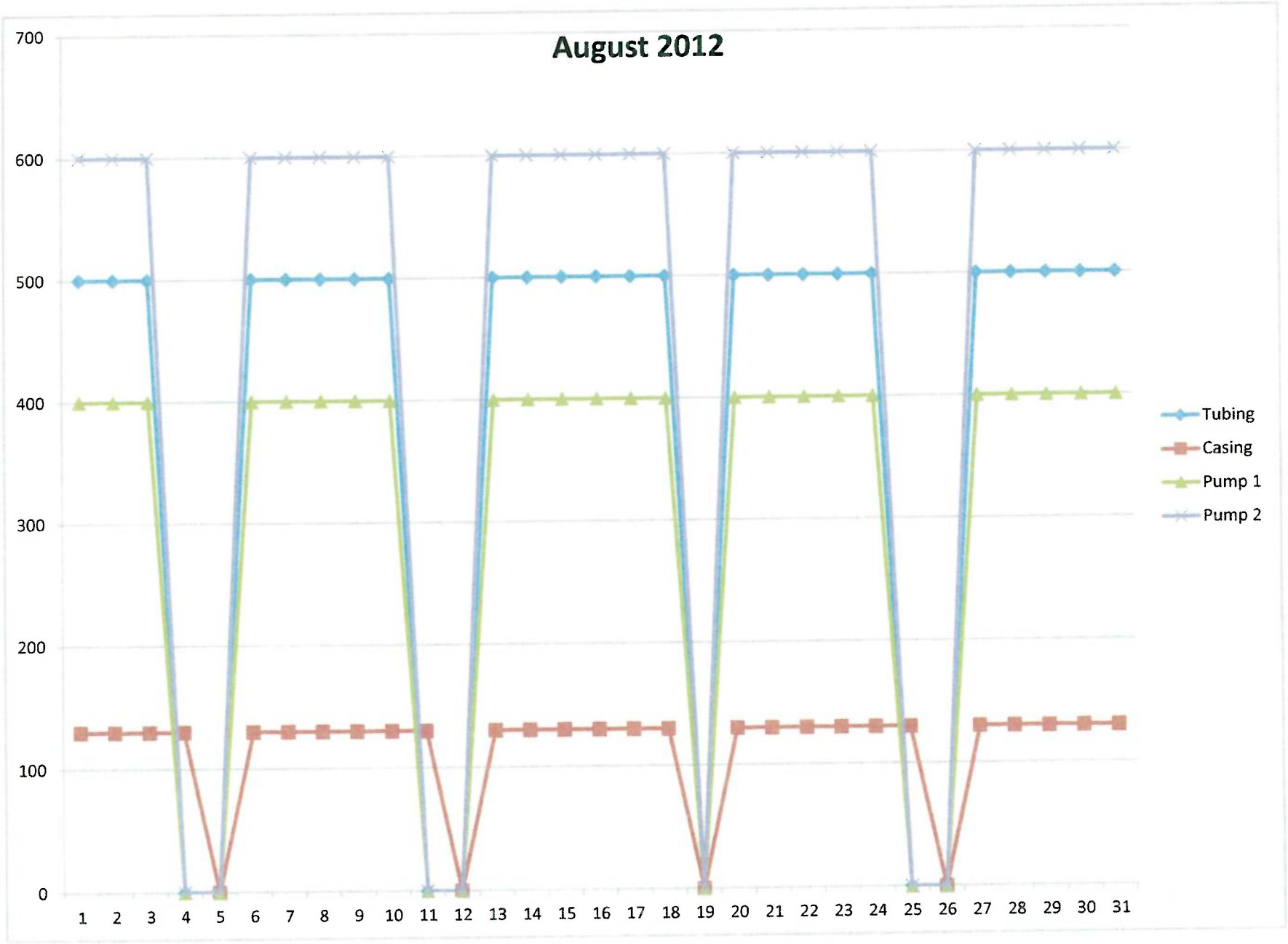
August 2012

WATTENBERG DAILY EVALUATION SHEET

Date	Time	Injecting Fluid Yes	Injecting Fluid No	Pressured Annulus Yes	Pressured Annulus No	Tubing Pressure	Annulus Pressure	Estimated Barrels Injected (prior 24 hrs)	Ambient Air Temperature (est)	Weather Conditions	Remarks/Summary Prior 24 Hrs.
1	6:30A		X	X		Ø	130	338			
2	6:45A		X	X		Ø	130	655			
3	6:15A		X	X		Ø	130	353			
4	Closed		X	X		Ø	130	715			
5	Closed		X	X		Ø	130	Ø			
6	6:15A		X	X		Ø	130	Ø			
7	6:15A		X	X		Ø	130	684			
8	6:15A		X	X		Ø	130	963			
9	6:30A		X	X		Ø	130	516			
10	6:30A		X	X		Ø	130	678			
11	Closed		X	X		Ø	130	478			
12	Closed		X	X		Ø	130	Ø			
13	6:30A		X	X		Ø	130	Ø			
14	6:30A		X	X		Ø	130	654			
15	6:30A		X	X		Ø	130	927			
16	6:30A		X	X		Ø	130	722			
17	6:30A		X	X		Ø	130	902			
18	6:30A		X	X		Ø	130	688			
19	Closed		X	X		Ø	130	348			
20	6:30A		X	X		Ø	130	Ø			
21	6:15A		X	X		Ø	130	765			
22	6:15A		X	X		Ø	130	809			
23	6:15A		X	X		Ø	130	857			
24	6:15A		X	X		Ø	130	878			
25	Closed		X	X		Ø	130	964			
26	Closed		X	X		Ø	130	Ø			
27	6:15A		X	X		Ø	130	Ø			
28	6:30A		X	X		Ø	130	630			
29	6:30A		X	X		Ø	130	1117			
30	6:30A		X	X		Ø	130	984			
31	6:30 AM		X	X		Ø	130	664			



Suckla Farms
Injection Well #1
8-1-2012 to 9-4-2012
1000 LB Spring Back Side
Pressure @ 10 lb equals 100 P.S.I.


August 2012
700
600
500
400
300
200
100
0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
Tubing
Casing
Pump 1
Pump 2

LEASE #	LEASE NAME	DATE 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30		LEASE TOTALS
61864	AMOCO-CHARTER-SCHNEI										17	30									37												84
61883	AMOCO CHART SCHNEIDER A										16	30									36												82
61902	AMOCO CHART SCHNEIDER B										17	30									37												84
58368	AMOCO-ENERGY-SMITS U				40									30						30							30						130
67529	ANDERSON #1					50																											50
61450	ANDERSON 1, 2																		45														45
17450	ANDERSON																	20															20
58425	BELL UNIT, *CHARLES					30							32												15								77
58406	BELL, *CHARLES C					30							33												15								78
59850B	BERGER, *JACK & BERG											45																					45
62607	BERNHARDT 1-11																									30							30
24571	CAMENISCH 2-32				10																												10
24591	CAMENISCH 8-32				10																												10
24569	CAMENISCH 41-32				10																												10
24704	CAMENISCH 50-32				10																												10
17451	CARTER 21-33						130				130		65		25												80						430
58463	CHRISTENSEN UNIT, *N				15																18					20							53
58444	CHRISTENSEN, *NELS				15																17					20							52
6825	CHURCH 7-A 31-2																									80							80
09163	COBURN CLEMENTINE 1					20															15												35
09593	COBURN CLEMENTINE B1					20															15												35
58482	DAMIANA, *JAMES A					30																				30							60
60040	DEEPE C, *CARL R																				35												35
07895	DEVORE 1, 2																				9												9
07896	DEVORE 2																				8												8
09272	DEVORE 3, 4																				9												9
09271	DEVORE 4																				9												9
07886	DUTCHER B 1							15													18												33
08945	DUTCHER B 2							15													19												34
08684	DUTCHER C 1							15													19												34
08899	DUTCHER C 2							15													19												34
67144	ED KAM 4-33																			30													30
08391	ELKHORN CO B3							6													6												12
08694	ELKHORN CO B5							5													5												10
09488	ELKHORN CO B6							6													6												12
09489	ELKHORN CO B7							6													6												12
09490	ELKHORN CO B8							6													6												12
09491	ELKHORN CO B9							6													6												12
16081	EWING 23-30																				20	40											60
00001	FACILITY 1				80			125			60		130						80	40					50			130					695
00002	FACILITY 2										270		130					160		35		195						80	100				970
00003	FACILITY 3										40											60											100
00004	FACILITY 4												110	70	130							160					130	130					730
00005	FACILITY 5												20	80	105							35				25		140					405
00006	FACILITY 6						35							30																			65
00007	FACILITY 7																										100		160				260
00008	FACILITY 8							130																			130						260
004WA	FACILITY 4WA																											130					130
004WB	FACILITY 4WB					90							60									70											220
69064	FED WILDHORSE 10,15,																	70															70
60095	FINDLAY, *RICHARD R																												80				80
59269	FIRECRACKER											35							65									50					150
62016	FRISBEE																										80						80
32751	FRONT RANGE 11-17-5														130					60	260							102					552
32754	FRONT RANGE 11-17-6																											103					103
32762	FRONT RANGE 11-17-7				520	580					32																						1132
32755	FRONT RANGE 11-17-8				715	130	80				33																						958
25792	FRONT RANGE 11-17-11					70						130	130																				330
62608	GENESIS 1																									100							100
62603	GENESIS 3													40																			40
59839	GRANT #'S 1,2,3,4											45																	38				83
60173	GREELEY NATIONAL BAN																												30				30
5869	GUTHRIE 1 & 2						36						40					35								45							156
60211	HANKS						30														35												65
60271	HART UNIT G						5																										5
60274	HART UNIT I						5																										5
59033	HAUDRICH #1 & 2					40		25											40									35					140
62020	HEIN 1-2																		35														35
25314	HEPP 31-32																											40					40
60290	HERMAN UNIT B, *ALFR						30											25											18				73
58505	HERMAN UNIT, *ALFRED						30											25											17				72
58501	HLADKY-O'GORMAN						15																		17								32
60310	HORST B, JOHN 1 & 2																	15															15
04200	HORTH R1-R2												20																50				70
2199	HOSMER 4-4																												40				40
60324	HUNZIKER																					120											120
59592	JOHNSON #'S 1 & 2																		25														25
08680	JOHNSON ROLAND 1																				28												28
08896	JOHNSON ROLAND B-1																				27												27
60344	JUST 2																												10				10
16057	KOCH 41-6												20																				20
09204	KOCH, KEN												20																				20
29642	KOESTER 18-33														40				50									40					130

34025	KOESTER 18-33-5				80		100				65																							245
34022	KOESTER 18-33-22				40																													40
29606	KOESTER 3-33-3										65	30							30			25												150
6080	KORTUM 2 A													30																				30
31483	KNUDSEN																												80					80
07666	KUNZMAN JOHN A #1																												10					10
09296	KUNZMAN 2																												10					10
09719	KUNZMAN 4																												10					10
09653	LANSDOWN 1										30																							30
07348	LANSDOWN WM D 1										30																							30
10437	LANSDOWN WM D UNIT D1							55							20														30					105
59831	LANSON'S FARM 1-16														60							100					80		57					297
16883	LEGG 14-22							55							20														30					105
56138	LOEFFLER 1-18						30																			20								50
67150	LOEFFLER 2-24																									20								20
56144	MATSUSHIMA 1-5																									30								30
23517	MATSUSHIMA 2-6X																									30								30
56141	MATSUSHIMA 3-14													20																				20
23516	MATSUSHIMA 4-19X													20																				20
68429	MAUL 20-2							30																										30
62564	MCCARTY 2																		20															20
26729	MCCARTY 10-21																		20															20
07881	MCCOY PHILLIP #1																									60								60
59071	MCCRUMB #'S 1 & 2				40									30											45									115
8644	MILLARD 1										20			15																				35
10548	MILLARD 2										20			15																				35
58709	MILLER 13-5							12											22															34
68278	MILLER B #14, *CARL							11											22															33
60559	MILLER E #1, *CARL A							12											21															33
6436	MITCHELL 32-3					30						30																						60
6442	MITCHELL 32-8																		40							30								70
62295	MONFORT 1-29																			40														40
62296	MONFORT 2-30													25																				25
6352	MURPHY 5-2					40									15							20			45									120
6336	MURPHY 31-3										130							90		75		190												485
9075A	MUSICK 2-4-7																								10									10
9075B	MUSICK 3-5																		40						10									50
32872	NRC 9-9-15H				135		45	35				40		95	25			60				80			75				90					680
6119	NEWLANDER													30																				30
59619	ROCKY MOUNTAIN FUEL 9-8						20																						17					37
60762	ROCKY MTN FUEL CO C 7&8						20																						16					36
68126	ROCKY MTN FUEL CO C 4, 10						40																						17					57
6377	ROSENFIELD 6-1														25																			25
6381	ROSENFIELD 6-5											35																						35
60790	SCHUTT, MARVIN E 1																	15																15
61186	SELTZER 1A						30																											30
15997	SHANNON 24-30																					40												40
12602	SPRAGUE A M A 1																	20																20
6515	STATE 14-32							43				22			30					15														110
6741	STATE 14							44				21			30					15														110
6748	STATE 14-31							43				22			30					15														110
0819A	STREAR, *SIDNEY																	30																30
60820	STREAR																	30																30
66643	STROH #2				10																													10
24147	STROH 28-16				10																													10
26308	STROH 15-28				10																													10
24238	STROH 28-9				10																													10
24237	STROH 28-10				10																													10
60838	SUCKLA A UNIT 1&2						12																					13						25
60895	SUCKLA D UNIT 1&2						11																					14						25
60952	SUCKLA FARMS C 2&3						12																					13						25
60990	SUCKLA E											55																						55
24646	SUNMARKE										325		45									75												445
58653	TWOMBLEY B, *MARGARE										40														70									110
2091B	UPRR 23 D4																												40					40
61008	UPRR 42 D							85											100										100					285
61047	UPRR 42 PAN AM G																				55													55
58691	UPRR 42 PAN AM K													30															30					60
61067	UPRR 43 PAN AM I														55							40						60						155
61078	VINCENT UNIT, R S 1&																				20													20
62130	WAGNER #1																									9								9
61719	WAGNER #1B						12													17						9								38
62131	WAGNER #'S 1A & 2A						13													18						9								40
61095	WALKING, *CARY						15																		18	8								41
66995	WUERTZ 12-3							30																										30
	TOTALS	0	0	0	1770	1160	756	830	0	0	1340	600	855	560	740	0	0	595	655	390	800	1250	0	0	370	575	630	1080	1080	0	0	0		
																																		16036
																																		16036

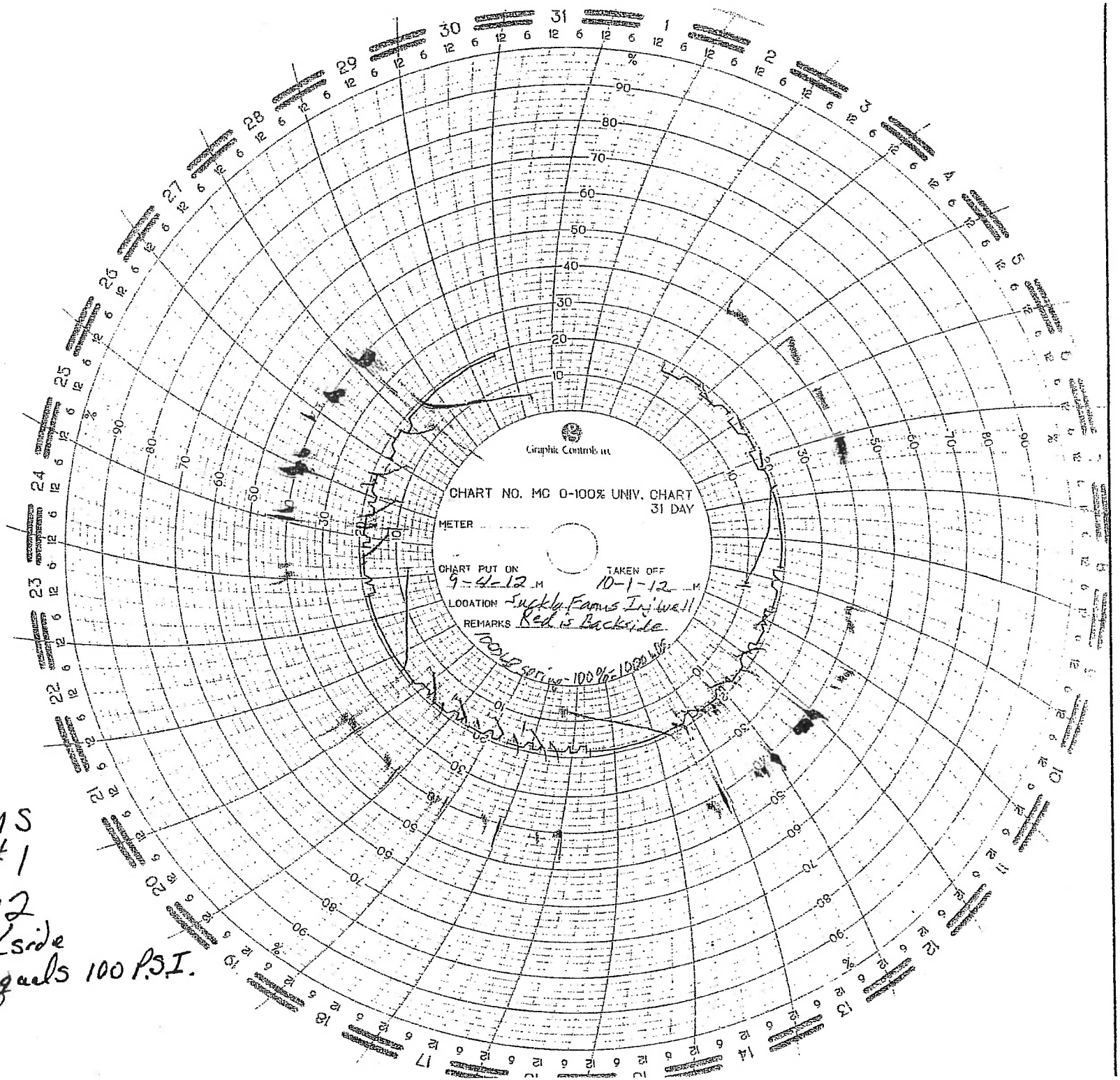
ASE #	LEASE NAME	DATE 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	LEASE TOTALS
																																	0
																																	0
	ANGI ALLES RECEIVER																																0
18	BERTHOUD BOOSTER																																0
	CDP 7 RECEIVER																																0
12	EATON PLANT																																0
33	ENTERPRISE BOOSTER																																0
09	GREELEY OFFICE																																0
11	GREELEY PLANT																																0
	JODY BOOSTER																																0
18	JOHNSTOWN BOOSTER																																0
34	KRAUTHEAD																																0
13	LUCERNE PLANT																																0
	MARIA BOOSTER																																0
18	MARILYN BOOSTER																																0
18	MARTHA BOOSTER																																0
14	MEWBOURN PLANT																																0
	MID POINT BOOSTER																																0
	PARKER PARSLEY BOOSTER																																0
32	PLATTEVILLE PLANT																																0
	REINICK RECEIVER																																0
35	RIVERSIDE BOOSTER																																0
32	ROGGEN FIELD																																0
31	ROGGEN PLANT						120							220						120							240						700
18	SINGLETREE BOOSTER																																0
	SOUTHFIELD BOOSTER																																0
10	SPINDLE PLANT																																0
18	SURREY BOOSTER																																0
36	TAMPA																																0
23	WELD BOOSTERS																																0
17	WELD FIELD																																0
95	WELD MEASUREMENT																																0
18	WEST SPINDLE BOOSTER																																
																																	0
	TOTAL	0	0	0	0	0	120	0	0	0	0	0	0	220	0	0	0	0	0	120	0	0	0	0	0	0	240	0	0	0	0	0	700
																																	700

September 2012

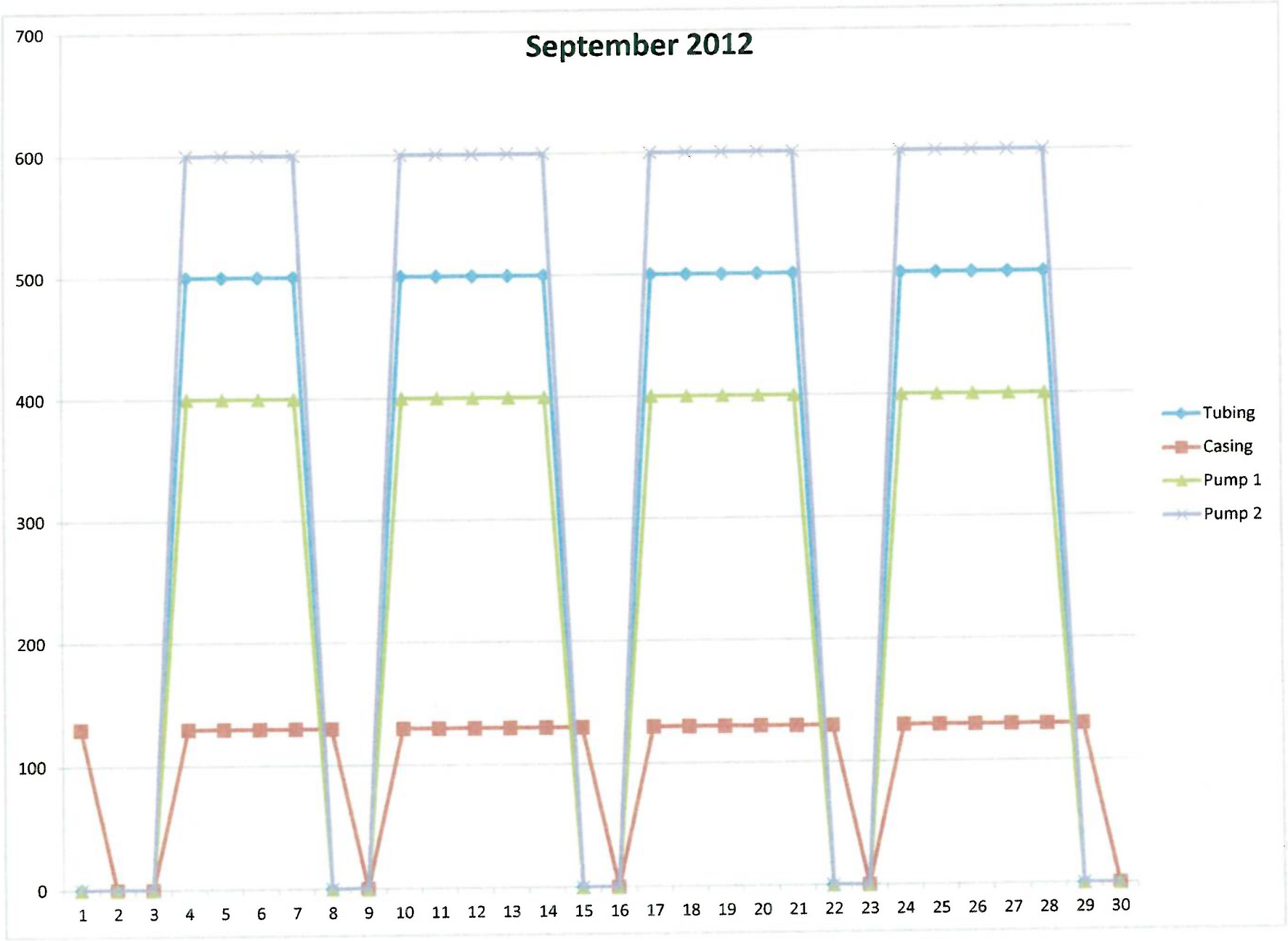
September 2012

WATTENBERG DAILY EVALUATION SHEET

Date	Time	Injecting Fluid Yes	Injecting Fluid No	Pressured Annulus Yes	Pressured Annulus No	Tubing Pressure	Annulus Pressure	Estimated Barrels Injected (prior 24 hrs)	Ambient Air Temperature (est)	Weather Conditions	Remarks/Summary Prior 24 Hrs.
1	Closed		X	X		Ø	130	814			
2	Closed		X	X		Ø	130	Ø			
3	Closed		X	X		Ø	130	Ø			
4	6:30A		X	X		Ø	130	Ø			
5	6:15A		X	X		Ø	130	1052			
6	5:00A		X	X		Ø	130	1280			
7	5:30A		X	X		Ø	130	1146			
8	Closed		X	X		Ø	130	1151			
9	Closed		X	X		Ø	130	Ø			
10	5:45A		X	X		Ø	130	Ø			
11	5:45A		X	X		Ø	130	919			
12	5:45A		X	X		Ø	130	816			
13	6:30A		X	X		Ø	130	831			
14	5:45A		X	X		Ø	130	606			
15	Closed		X	X		Ø	130	452			
16	Closed		X	X		Ø	130	Ø			
17	5:45A		X	X		Ø	130	Ø			
18	5:45A		X	X		Ø	130	563			
19	5:45A		X	X		Ø	130	502			
20	5:45A		X	X		Ø	130	624			
21	5:45A		X	X		Ø	130	668			
22	Closed		X	X		Ø	130	940			
23	Closed		X	X		Ø	130	Ø			
24	6:30A		X	X		Ø	130	Ø			
25	6:30A		X	X		Ø	130	640			
26	6:30A		X	X		Ø	130	431			
27	6:30A		X	X		Ø	130	738			
28	6:30A		X	X		Ø	130	926			
29	Closed		X	X		Ø	130	601			
30	Closed		X	X		Ø	130	Ø			
31											



Suckla Farms
Injection Well #1
9-4-12 to 10-1-12
1000 LB Spring Backside
Pressure @ 10% equals 100 P.S.I.


September 2012
700
600
500
400
300
200
100
0
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
Tubing
Casing
Pump 1
Pump 2