OMB No. 2040-0042 Approval Expires 4/30/2022

United States Environmental Protection Agency

Underground Injection Control
Permit Application for a Class II Well

(Collected under the authority of the Safe Drinking Water Act. Sections 1421, 1422, and 40 CFR Part 144)

For Official Use Only

Date Received

Permit Number

Read Attached Instructions Before Starting

I. Owner Name, Address, Phone Number and/or Email

Merit Energy Company
13727 Noel Rd #1200, Dallas, TX 75240

II. Operator Name, Address, Phone Number and/or Email

Merit Energy Company
13727 Noel Rd #1200, Dallas, TX 75240

III. Commercial Facility

- [ ] Yes
- [x] No

IV. Ownership

- [ ] Private
- [ ] Federal
- [x] State/Tribal/ Municipal

V. Permit Action Requested

- [ ] New Permit
- [ ] Permit Renewal
- [x] Modification
- [ ] Add Well to Area Permit
- [x] Other Conversion

VI. SIC Code(s)

1311

VII. Indian Country

- [x] Yes
- [ ] No

VIII. Type of Permit (For multiple wells, use additional page(s) to provide the information requested for each additional well)

- [x] A. Individual
- [ ] B. Area

Number of Wells	Well Field and/or Project Names
1	Steamboat Butte

IX. Class and Type of Well (see reverse)

A. Class	B. Type (enter code(s))	C. If type code is "X," explain.
II	D	

X. Well Status

- [ ] A. Operating
- [x] B. Conversion
- [ ] C. Proposed

Date Injection Started

Date Well Constructed

XI. Well Information

API Number: 49-013-06464

Permit (or EPA ID) Number: WY21098-07393

Full Well Name: Tribal C-13

XII. Location of Well or, for Multiple Wells, Approximate Center of Field or Project

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface Location

SE 1/4 of SE 1/4 of Section 30 Township 4N Range 91W

940 ft. from (N/S) S Line of quarter section

320 ft. from (E/W) E Line of quarter section.

Latitude: 43.288761

Longitude: -108.914032

XIII. Attachments

In addition to this form, complete Attachments A-U (as appropriate for the specific well class) on separate sheets. Submit complete information, as required in the instructions and list all attachments, maps or other figures, by the applicable letter.

XIV. Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibliity of fine and imprisonment. (Ref. 40 CFR § 144.32)

Name and Official Title *(Please Type or Print)*	Signature	Date Signed
Michelle Yalung - Regulatory Analyst		11/24/2020

MERIT ENERGY COMPANY

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December 30, 2020

US Environmental Protection Agency
Underground Injection Control, Region 8
1595 Wynkoop Street
Denver, Colorado 80202

RE: Tribal C-13
Underground Injection Control Permit Application
Sec 30-T4N-R1W
Fremont County, Wyoming

Enclosed is an Underground Injection Control (UIC) permit application for a proposed saltwater disposal well in the Steamboat Butte Field, Fremont County, Wyoming. The well in question is the Tribal C-13, located in the SE/4 SE/4 Section 30, T4N, R1W. Merit Energy Company proposes converting the well from a commingled Phosphoria and Tensleep formation Class II injector – EOR into a Class II SWD. The purpose is to provide Merit Energy Company a disposal location for waste produced in association with our Wind River oil and gas production.

The Steamboat Butte Field is located within the boundaries of the Wind River Indian Reservation. The injection project for the Nugget, Phosphoria and Tensleep formations was originally authorized by the Bureau of Land Management (BLM). Since that time, the Environmental Protection Agency (EPA) has been granted jurisdiction over all injection activity on the reservation. The Steamboat Butte Field injection projects have been considered to be rule authorized programs. However, EPA procedures require that individual permits be filed for any new injection wells, whether they be grass roots or conversions.

Accordingly, Merit respectfully requests that the EPA review and grant approval of the application to convert the Tribal C-13 well to a Class II SWD well in the Phosphoria and Tensleep formations. Should any questions arise concerning this matter, or additional information be required, please feel free to contact Michelle Yalung at phone number (972)628-1441.

Sincerely,
MERIT ENERGY COMPANY

Michelle Yalung
Regulatory Analyst

MERIT ENERGY COMPANY

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A. Area of Review Methods.

The area of review for this application is a circle of one-quarter mile radius centered on the surface location of the Tribal C-13 well. The Tribal C-13 well is located 940 feet from the south line (FSL) and 320 feet from the east line (FEL) (SESE/4) of Section 5, Township 4 North, Range 1 West, Fremont County, Wyoming. The area of review is contained within the boundaries of the Wind River Indian Reservation. For notification purposes, the Joint Business Council, the Bureau of Indian Affairs, and the Bureau of Land Management were all provided abridged copies of this permit application. These documents were forwarded to the following addresses:

Chairman, Joint Business Council Arapahoe & Shoshone Tribes
P. O. Box 830
Fort Washakie, WY 82514
United States Department of the Interior Bureau of Indian Affairs
Wind River Indian Reservation Fort Washakie, WY 82514
United States Department of the Interior Bureau of Land Management
Lander Resource Area
P. O. Box 589
Lander, WY 82520
Chairman, Richard Brannan. Arapahoe Business Council
P. O. Box 396
Fort Washakie, WY 82514
Shoshone Business Council Chairman, Ivan Posey
P. O. Box 770
Fort Washakie, WY 82514
The State of Wyoming
Oil. & Gas Conservation Comm.
P. O. Box 2640
Casper, WY 82602

B. Map of Well/Area and Area of Review.

Enclosed with this application, as Exhibit A, is a map showing the area within one-quarter mile of the Tribal C-13 well. The map displays the location of all wells drilled within the area.

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C. Corrective Action Plan and Well Data.
Enclosed with this application as Exhibit B, Exhibit B-1 and B-2 is a tabulation and wellbore diagrams of all pertinent data, reasonably available, on all wells located within the area of review. Merit does not plan on operating Tribal C-13 well at a pressure that exceeds the Phosphoria or Tensleep parting pressures.

D. Map and Cross Section of USDWs
This is not applicable to Class II wells.

E. Name and Depth of USDWs (Class II)
Within a mile of the subject well there are no permitted water wells. The few water wells within a radius of 5 miles of the Tribal C-13 well consist of Wind River formation wells less than 500 feet deep. The only known underground sources of drinking water (USDWs) in the general area of the well have been identified by the State of Wyoming Oil and Gas Conservation Commission per Martha Horn, as seen in the following table.

Possible USDWs in this area are as follows:

Name	Depth *1	TDS mg/L *2
Quartermary Sands	0'-380'	2430
Wind River Sands	Not Present	700 to 2800
Cody Shale (Top Eroded)	380'-3012'	1750 to 2430
Frontier Sand	3075'-3660'	4383 to 7630
Muddy Sand	4450'-4520'	6080

The USDW intervals are each isolated by thick competent shales (confining zones). The Cody Shale with a gross interval of 2632' contains only thin isolated sands. The Frontier USDW is confined by the overlying Cody, and 506' of underlying Mowry and upper Thermopolis shales. The Muddy sand is confined by overlying Mowry and upper Thermopolis, and 102' of underlying lower Thermopolis shales. The Dakota sand is confined by overlying lower Thermopolis, and 70' of underlying Fuson shale.

All possible USDW intervals encountered in the Tribal C-13 well are currently producing hydrocarbons in this area. The Frontier, Muddy and the Dakota sands have all produced in the Steamboat Butte field and the discontinuous sand lenses in the Cody shale have hydrocarbon shows and are oil productive in the nearby Pilot Butte field.

F. Maps and Cross Sections of Geologic Structure.
This is not applicable to Class II wells.

G. Geological Data on Injection and confining zones.
The proposed zones of injection for the Tribal C-13 well are the Phosphoria and Tensleep formations. The Phosphoria formation at Tribal C-13 consists of 184' of medium crystalline gray dolomitic limestone with milky

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and white chert. The Tensleep formation at Tribal C-13 consists of 72' of fine to medium grained white to brown stained sandstone with thin dolomitic sandstone interbeds. The Tribal C-13 well is currently a Tensleep Class II injector for EOR (gross interval: 6862' - 6934'). Once the conversion is completed, salt water and other produced waste injection will occur through the following intervals:

Phosphoria 6665'----6690' (existing perforations)

Tensleep 6862 '----6934' (open hole)

Enclosed with this application as Exhibit C is a copy of the EPA's Acceptable Sand-Face Fracture gradient for the Steamboat Butte Field dated August 12, 1997. The fracture gradients for the proposed Phosphoria formation is 0.77 and the proposed Tensleep formation is 0.70 based on the above-mentioned letter.

In Tribal C-13 well, the Phosphoria formation is encountered at a depth of 6665' KB, 6652' GL. The injection fluid for the well will be a mixture of Steamboat Butte Field produced waters, with an estimated specific gravity of 1.00. Given these conditions, the surface fracture pressure for the Phosphoria formation in the Tribal C-13 has been calculated to be 2246 psig.

Phosphoria Fracture Gradient:

The fracture gradient for the Phosphoria formation in Tribal C-13 injection well is calculated in the following manner:

	Pf	=	[Fg - 0.433 (SG I)]*D
Where:	Pf	=	Surface fracture pressure, psig
	Fg	=	Fracture gradient, psi/ft.
	SGI	=	Specific gravity of injection Fluid
	0.433	=	Pressure gradient of fresh water, psi/ft.
	D	=	Formation Depth, ft, GL.
For:	Fg	=	0.77 psi/ft
	SGI	=	1.00
	D	=	6665'
	Pf	=	2246 psig

In Tribal C-13 well, the Tensleep formation is encountered at a depth of 6862' KB, 6849' GL. The injection fluid for the well will be a mixture of Steamboat Butte Field produced waters, with an estimated specific gravity of 1.00. Given these conditions, the surface fracture pressure for the Tensleep formation in the Tribal C-13 has been calculated to be 1832 psig.

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Tensleep Fracture Gradient:

The fracture gradient for the Tensleep formation in Tribal C-13 injection well is calculated in the following manner:

	Pf	=	[Fg - 0.433 (SG I)]*D
Where:	Pf	=	Surface fracture pressure, psig
	Fg	=	Fracture gradient, psi/ft.
	SGI	=	Specific gravity of injection Fluid
	0.433	=	Pressure gradient of fresh water, psi/ft.
	D	=	Formation Depth, ft, GL.
For:	Fg	=	0.70 psi/ft
	SGI	=	1.00
	D	=	6862'
	Pf	=	1832 psig

Enclosed with this application as Exhibit D is a SP-Resisitivity log showing the Dinwoody as a confining zone for the Phosphoria. The Dinwoody is encountered at the depth of 6555' and

H. Operating Data.

1) Average rate: 5000 BPD, Maximum rate: 8500 BPD
2) Average pressure 1330-1825 PSIG estimated. Maximum pressure 1825 PSIG, respectively.
3) The annulus fluid for the Tribal C-13 well will be fresh water treated with a corrosion inhibitor and an oxygen scavenger.
4) Not applicable for Class II wells.

5) The source of water for injection into the Tribal C-13 well will be a mixture of produced water from all producing formations in the Steamboat Butte Field. Enclosed with this application as Exhibit E is a standard analysis of that produced water.

I. Formation Testing Program

Injectivity into the Tribal C-13 well will be monitored by means of a pressure gauge and flow meter located at the wellhead. A mechanical integrity test will be performed prior to the initiation of injection operations in order to verify the integrity of the wellbore and injection equipment. Enclosed with this application as Exhibit F is a standard analysis of the Phosphoria and Tensleep formations water.

J. Stimulation Program – No stimulation will occur during this conversion.

K. Injection Procedures.

The current low-pressure water injection system in the Steamboat Butte Field consists of a single H-pump These pumps are installed at the C3-Battery. Produced salt water is transferred from the Tribal C and Tribal E Batteries to

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the water injection plant. This water is treated in 2-2,000 barrel storage tanks at the injection plant. The water is then transferred to the Tribal C13 through a 4" Steel injection line.

L. Construction Procedures

Tribal C-13 was drilled & completed open hole as a Tensleep producer in 1951. Original IP was 1021 BOPD with a 16% water cut. In 1956, a fish was left in the bottom section of the open hole. Later, in 1968, a packer was left in the hole. In 1991, attempts to wash over the packer were unsuccessful and the packer was pushed to bottom and capped with cement to 6934' in the open hole.

The well was shut-in from 12/91 to 3/97 due to high water cut. In 1997, after being reactivated, the well produced 111 BOPD and 4938 BWPD. In January 2000, crosslink treatment was pumped and shut-off a large portion of the Tensleep fluid production. The Tensleep was sand frac'd following the x-link to restore production and the Phosphoria was perforated and commingled with the Tensleep. The well initially produced 355 BOPD and 3287 BWPD commingled, but has declined rapidly over the next 5 years.

The Tribal C-13 was converted to EOR related water injection to supply pressure support and sweep to offset Phos-Ten producers (Tribal C-39, Tribal C-40, Tribal C-42, Tribal C-44, and Tribal C-45). Since 2009 there has been 2.7 Million bbls of water injected into the C-13 with water primarily entering the Tensleep per the injection survey ran on 6/29/2020 (attached). The EOR purpose of the C-13 injection permit is complete, all 5 of these producers have been shut-in due to a producing Water-oil ratio that is uneconomic. In this time the C-13 has proven to be capable of injecting very large amounts of water at a very low surface pressure. In 2009 a Step-rate test was performed and achieved a rate of 28,000 bbls of water injected per day without being able to find the Frac gradient in the Tensleep. This Step-rate test is attached as Exhibit G.

It is therefore proposed that the UIC Class II injection – EOR permit be converted to a Class II SWD. This disposal well will support all of Merit's Wind River operations and will not require the drilling of a new well just for disposal purposes.

M. Construction Details

Enclosed with this application as Exhibit H is a schematic diagram of the current Completion. The proposed completion will be the exact same, no well bore construction work will performed in relation to this application unless deemed necessary by the EPA.

N. Changes in Injected Fluid

Injection disposal fluid samples will be submitted to EPA per the COA requirements upon approval.

O. Plans for Well Failures

Annulus pressure will be monitored to detect any leaks in the tubing-packer system. If any leaks are detected, the well will be shut-in and corrective measures will be taken to restore integrity to the wellbore.

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P. Monitoring Program
Injection pressure will be monitored by means of a pressure gauge located on the tubing side of the wellhead of the Tribal C-13 well.

Q. Plugging and Abandonment
Enclosed with this application are Exhibit I, J for the plugging and abandonment plan, including EPA Form 7520-19 (4-2022), for the Tribal C-13 well.

R. Necessary Resources
All injection wells in the Steamboat Butte Field are listed on the Financial Assurance Package filed by Marathon October 5, 2005. The filing, available at the EPA Region VIII office, indicates that sufficient financial resources exist to cover the plugging and abandonment costs for the Tribal C-13 well. Conversations with EPA staff indicate that an amended Financial Responsibility filing, incorporating the well, will not be required at this time. Instead, well Tribal C-13, and its associated abandonment costs, are included in the 2005 filing.

Aquifer Exemptions
Cause No.1, Order No.32, Docket No. 111-82

S. Existing EPA Permits
Not required for existing Class II injection projects.

T. Description of Business
Merit Energy Company whose main business is the exploration, development, and production of oil and gas. The Tribal C-13 injection well will be operated by Merit for the purpose of exploiting the oil resources of the Steamboat Butte Field.

Sincerely,
MERIT ENERGY COMPANY

Michelle Yalung
Regulatory Analyst
Exhibits follow

Exhibit A

108°55'30"W 108°55'0"W 108°54'30"W

43°17'30"N

43°17'0"N

TRIBAL C 36H
MARATHON OIL CO
TD: 8360
Elev: 5763

TRIBAL C 41
MARATHON OIL CO
TD: 7177
Elev: 5790

TRIBAL C 14
MARATHON OIL CO
TD: 7167
Elev: 5794

TRIBAL C 39H
MARATHON OIL CO
TD: 7028
Elev: 5773

TRIBAL C 40H
MARATHON OIL CO
TD: 7438
Elev: 5773

TRIBAL C 44
MARATHON OIL CO
TD: 7175
Elev: 5785

4511.49 AC
1.00000 MI

TRIBAL C 3
BRITISH AMERICAN OIL PRODUCTION CO THE
TD: 7104
Elev: 5761

TRIBAL C 13
MARATHON OIL CO
TD: 7051
Elev: 5764

TRIBAL C 45
MARATHON OIL CO
TD: 7150
Elev: 5752

TRIBAL C 18
BRITISH AMERICAN OIL PRODUCTION CO THE
TD: 1235
Elev: 5755

TRIBAL C 42
MARATHON OIL CO
TD: 7145
Elev: 5781

TRIBAL C 23
MARATHON OIL CO
TD: 7140
Elev: 5763

TRIBAL C 37
MARATHON OIL CO
TD: 7198
Elev: 5763

TRIBAL C 43
MERIT ENERGY CO
TD: 4615
Elev: 5769

TRIBAL C 47
MARATHON OIL CO
TD: 7150
Elev: 5766

TRIBAL C 15
BRITISH AMERICAN OIL PRODUCTION CO THE
TD: 7072
Elev: 5754

TRIBAL C 10
MARATHON OIL CO
TD: 7047
Elev: 5752

TRIBAL C 38
MARATHON OIL CO
TD: 7217
Elev: 5751

TRIBAL C 35
MARATHON OIL CO
TD: 7200
Elev: 5763

TRIBAL C 46
MARATHON OIL CO
TD: 7170
Elev: 5755

TRIBAL C 8
BRITISH AMERICAN OIL PRODUCTION CO THE
TD: 7045
Elev: 5752

FREMONT
WYOMING
T4N R1W
30 29 31 32

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- OIL
- OIL SHOW
- W-INJW
- ABD-OW
- DRY & ABANDONED
- Streets Carto
- USA Hydro
- QTR MI BFR
- HALF MILE BUFFER
- MERIT LEASEHOLD
- USA Topo Maps

API	LSE_NAME	WELL_NUM	CURR_OPR	DRLR_TD	SPUD_DATE	COMP_DATE	REF_ELEV
4901322853	TRIBAL C	43	MERIT ENERGY CO	4615	2013-07-01	2013-07-15	5769
4901322110	TRIBAL C	44	MERIT ENERGY CO	7175	2001-12-28	2002-01-19	5785
4901322109	TRIBAL C	45	MERIT ENERGY CO	7150	2002-01-16	2002-02-01	5752
4901322108	TRIBAL C	46	MERIT ENERGY CO	7170	2013-12-19	2014-02-12	5755
4901322107	TRIBAL C	47	MERIT ENERGY CO	7150	2011-10-11	2012-04-19	5766
4901322018	TRIBAL C	41	MERIT ENERGY CO	7177	2014-01-16	2014-01-31	5790
4901322017	TRIBAL C	36H	MERIT ENERGY CO	7026	2009-07-14	2009-09-05	5773
4901322016	TRIBAL C	42	MERIT ENERGY CO	7145	2014-01-09	2014-02-18	5781
4901322015	TRIBAL C	40H	MERIT ENERGY CO	7438	2011-07-27	2011-09-18	5773
4901322014	TRIBAL C	38	MERIT ENERGY CO	7217	2013-08-20	2013-09-29	5751
4901321918	TRIBAL C	37	MERIT ENERGY CO	7198	1949-12-01	2009-01-15	5763
4901321911	TRIBAL C	36H	MERIT ENERGY CO	8360	2009-07-29	2009-09-18	5763
4901321844	TRIBAL C	35	MERIT ENERGY CO	7200	2015-12-03	2015-12-07	5763
4901305469	TRIBAL C	14	MERIT ENERGY CO	7167	1968-12-18	1969-01-01	5774
4901305465	TRIBAL C	18	BRITISH AMERICAN OIL PRODUCTION CO THE	1235	1955-01-25	1955-02-11	5755
4901305464	TRIBAL C	13	MERIT ENERGY CO	7051	2009-08-21	2009-09-01	5764
4901305463	TRIBAL C	3	MERIT ENERGY CO	7104	1944-08-08	1945-02-19	5761
4901305460	TRIBAL C	23	MERIT ENERGY CO	7140	2000-03-23	2000-05-01	5763
4901305458	TRIBAL C	15	MERIT ENERGY CO	7072	1952-05-01	1952-10-13	5754
4901305454	TRIBAL C	10	MERIT ENERGY CO	7047	2001-06-01	2001-08-15	5752
4901305450	TRIBAL C	8	BRITISH AMERICAN OIL PRODUCTION CO THE	7045	1948-03-09	1948-03-30	5752

N W E S

TRIBAL C13 HALF MILE BUFFER WITH WELLS

Steamboat Butte
Park Co, Wyoming

Map by: RNORZAG

Date:
Thursday, January 7, 2021

Coordinate System:
NAD 1983 StatePlane Wyoming West Central FIPS 4903 Feet

0 550 1,100 Feet

Scale: 1:12,000

Document Path: Z:\ArcMap Project - Regulatory\7-Michelle Yalung\MXD Projects\TRIBAL C13 HLF MI AOR.mxd

Well Information

Well Name	Tribal C 13
Well Type/Class	Salt Water Disposal (2D)
Reservation Name	WY | Wind River Joint
Oil Field Name	If not in the dropdown, leave blank and provide Oil Field Name in Comments.
API #	49-013-06464 (xx-xxx-xxxxx)
SPUD Date	2/7/1951 (mm/dd/yyyy)
Comments	Field name: Steamboat Butte

Well Location

1/4 1/4 Sec	*Section*	*Township*	*N/S*	*Range*	*E/W*
30	SESE	4	N	1	W

Latitude

	Deg		*Min*		*Sec*	**OR**	43.28867 *Decimal*

Longitude

	Deg		*Min*		*Sec*	**OR**	-108.91403 *Decimal*

Footage			*N/S line*			*E/W line*
Calls	994	*feet from*	S	320	*feet from*	E
State	Wy					
County	Fremont					

Exhibit B

Well Construction

Ground Elevation	5764	feet
Kelly Bushing	5777	feet
Total Depth of Well (KB)	7064	feet
Plugged Back Total Depth (KB)	6927	feet
Packer Depth (KB)	6909	feet

All Depths Measured in KB

Casing Type	*Casing Description*	*Hole* Diameter (in.)	*Casing* Diameter (in.)	*Casing Top (ft)*	*Casing Bottom(ft)*	*Cement Top (ft)*	*Cement Bottom(ft)*	*# of Sx*	*Cement Type*
Conductor	68' of 16" - Line pipe	19.000	16.000	13	81	13	91	100	Class G
Surface	711' of 10 3/4" 40.5# J-55	13.750	10.750	13	711	13	717	430	Class G
Production	6862' of 7" 23# N-80	8.750	7.000	13	6862	4610	6862	1200	14.2 ppg Class G

Perforations (include as much detail as allowable)

	Perf 1	*Perf 2*	*Perf 3*	*Perf 4*	*Perf 5*	*Perf 6*	*Perf 7*	*Perf 8*	*Perf 9*	*Perf 10*
Perf Status	Squeezed	Active	Open Hole							
Top Depth (ft KB)	1370	6665	6862							
Bot Depth (ft KB)	1400	6690	6960							

	Value		*Source of value*
Maximum Injection Pressure	1765	*psi*	Permit
Specific Gravity	1.00		Permit
Fracture Gradient	0.70	*psi/ft*	Permit
Depth (typically depth to top perf)	6654	*ft KB*	
Friction Loss	0	*psi*	permit
Comments	Source of information from EPA Permit WY21098-7393 (Tribal C13 Class II EOR) effective		

Provide "Source of Value" if "Other" selected.

Exhibit B

# of Sx	ment Type
50	class g
100	class h
200	class i

Exhibit B

Geological Setting

Include each unit from surface to the base of the injection zone.

Depths Measured in KB

Water Quality of Unit
(enter a value or range of values)

Unit Type	*Formation Name*	*Top (ft KB)*	*Bottom (ft KB)*	*Lithology*	*TDS*	*Value Range (mg/L)*	
						Lower	*Upper*
USDW	Quaternary Sands	0	380	Sand	Single Value	2430	2430
USDW	Cody Shale	380	3075	Shale	Value Range	1750	2430
USDW	Frontier Sand	3075	3660	Sand/Shale	Value Range	4383	7630
Confining Zone	Mowry Shale	3660	4228	Shale			
USDW	Muddy Sand	4228	4348	Sand/clay	Value Range	7292	7553
Confining Zone	Thermopolis Shale	4348	4450	Shale			
USDW	Dakota Sand	4450	4697	Sand/clay	Single Value	6080	6080
Geologic Unit	Lakota	4697	4743	Fluvial Sand			
Geologic Unit	Morrison	4743	4885	Shale			
Geologic Unit	Sundance	4885	5170	Sand/Shale laminations			
Confining Zone	Gyspsum Springs	5170	5366	Anhydrite			
Geologic Unit	Nugget	5366	5473	Sand			
Confining Zone	Chugwater	5473	6550	Sand/Shale laminations			
Confining Zone	Dinwoody	6550	6654	dense dolomite			
Injection Zone	Phosphoria	6654	6838	cyrstalline gray dolomitic limestone		7150	
Injection Zone	Tensleep	6838		white to brown stained sandstone		2768	

Exhibit B

Enter TOTAL number of AOR Wells: 10

Include only AOR wells that penetrate the TOP of the confining zone.

Well Information

	AOR Well #1	AOR Well #2	AOR Well #3	AOR Well #4	AOR Well #5	AOR Well #6
AOR (enter Well ID or leave blank)	4901306463	4901306454	4901306469	4901306460	4901321916	4901322017
Well Name	Tribal C3	Tribal C10	Tribal C14	Tribal C23	Tribal C37	Tribal C39
Type of Well	Producer	Producer	UIC Injection Well	UIC Injection Well	Producer	Monitoring We
Well Status		Temporarily Abandoned	Active	Active	Active	Active
Well Status Date	1/1/1984	8/1/2017	7/1/2003	Jul-00		
API # (xx-xxx-xxxxx)	4901306463	4901306454	4901306469	4901306460	4901321916	
Spud Date	8/9/1944	7/13/1947	6/16/1951	9/16/1961	11/4/1999	
Well	WY / State / Fremont / County	WY / State / Fremont / County	WY / State / Fremont / County			
Location	*1/4 Sec / Section / Township / N/S / Range / E/W*	*1/4 Sec / Section / Township / N/S / Range / E/W*	*1/4 Sec / Section / Township / N/S / Range / E/W*	*1/4 Sec / Section / Township / N/S / Range / E/W*	*1/4 Sec / Section / Township / N/S / Range / E/W*	*1/4 Sec*
	swsw / 29 / 4 / N / 1 / w	NENE / 31 / 4 / N / 1 / w	nese / 30 / 4 / N / 1 / w	sese / 30 / 4 / N / 1 / W	SWSW / 29 / 4 / N / 1 / W	nwsw
	Latitude / *Longitude*	*Latitude* / *Longitude*	*Latitude* / *Longitude*	*Latitude* / *Longitude*	*Latitude* / *Longitude*	*Latitude*
	41.2887688 / -108.9097675	43.28504 / -108.91405	43.2923 / -108.91371	43.28694 / -108.97411	43.2872139 / -108.909928	-105.6789

Well Construction

	AOR Well #1	AOR Well #2	AOR Well #3	AOR Well #4	AOR Well #5	AOR Well #6
Total Depth of Well (KB)	7104 feet	7047 feet	7167 feet	7050 feet	7198 feet	7179
Plugged Back Total Depth (KB)	0 feet	7040 feet	6994 feet	7050 feet	7125 feet	7117

Corrective Action

	AOR Well #1	AOR Well #2	AOR Well #3	AOR Well #4	AOR Well #5	AOR Well #6
Corrective Action	No Corrective Action	No Corrective Action	No Corrective Action	No Corrective Action	No Corrective Action	No Corrective
Due Date	N/a	N/a	N/a	N/a	N/A	N/a
Completion Date	N/a	N/a	N/a	N/a	N/A	N/a
Additional Comments	Well is P&A'd in 1984. See wellbore diagram for details.	Well is TA'd with a cement retainer set at 6557 on 8/5/2017		status date: 7/1/2000. oculd not fill out due to cell being locked	status date 11/4/1999. Could not fill out box due to being locked	status date 12

Casing

Depths measured in KB

AOR Well #1 Casing Type	Casing Top (ft)	Casing Bottom (ft)	Cement Top (ft)	Cement Bottom (ft)
Conductor	14	72	0	72
surface	14	1124	0	1075
Production	14	7104	4990	7104

AOR Well #2 Casing Type	Casing Top (ft)	Casing Bottom (ft)	Cement Top (ft)	Cement Bottom (ft)
Conductor	10	92	10	92
surface	10	1146	10	1150
Production	10	6823	4760	6920
Open Hole	10	7047		

AOR Well #3 Casing Type	Casing Top (ft)	Casing Bottom (ft)	Cement Top (ft)	Cement Bottom (ft)
conductor	16	81	16	81
Surface	16	736	16	739
production	16	6967	16	3084

AOR Well #4 Casing Type	Casing Top (ft)	Casing Bottom (ft)	Cement Top (ft)	Cement Bottom (ft)
Surface	16	275	16	275
Procuction	16	6822	2675	6824

AOR Well #5 Casing Type	Casing Top (ft)	Casing Bottom (ft)	Cement Top (ft)	Cement Bottom (ft)
Surface	17	845	17	845
PRODUCTION	17	7146	17	7146

AOR Well #6 Casing Type
surface
production

Perforations

	AOR Well #1 Perf 1	Perf 2	Perf 3	Perf 4	Perf 5	Perf 6
Perf Status	Plugged	Plugged	Plugged	Plugged	Plugged	Plugged
Top Depth (ft KB)	6724	6900	6914	6945	6978	7039
Bottom Depth (ft KB)	6734	6911	6942	6975	6998	7044

	AOR Well #2 Perf 1	Perf 2	Perf 3	Perf 4	Perf 5	Perf 6
Perf Status	Open	open	Open			
Top Depth (ft KB)	6616	6638	6825			
Bottom Depth (ft KB)	6620	6644	7047			

	AOR Well #3 Perf 1	Perf 2	Perf 3	Perf 4	Perf 5	Perf 6
Perf Status	open	open				
Top Depth (ft KB)	6730	6946				
Bottom Depth (ft KB)	6745	6994				

	AOR Well #4 Perf 1	Perf 2	Perf 3	Perf 4	Perf 5	Perf 6
Perf Status	Squeezed	OPEN	OPEN			
Top Depth (ft KB)	5895	6636	6840			
Bottom Depth (ft KB)	5896	6682	7050			

	AOR Well #5 Perf 1	Perf 2	Perf 3	Perf 4	Perf 5	Perf 6
Perf Status	Open	OPEN				
Top Depth (ft KB)	6670	6880				
Bottom Depth (ft KB)	6686	6920				

	AOR Well #6 Perf 1
Perf Status	open
Top Depth (ft KB)	6715
Bottom Depth (ft KB)	6727

Geological Setting

Formation	AOR Well #1 Depth to Top (ft KB)	Depth to Bottom (ft KB)	AOR Well #2 Depth to Top (ft KB)	Depth to Bottom (ft KB)	AOR Well #3 Depth to Top (ft KB)	Depth to Bottom (ft KB)	AOR Well #4 Depth to Top (ft KB)	Depth to Bottom (ft KB)	AOR Well #5 Depth to Top (ft KB)	Depth to Bottom (ft KB)	AOR Well #6 Depth to Top (ft KB)
Quaternary Sands	0		0	350	0	140	0		0		0
Cody Shale			350	3120	140	3049					
Frontier Sand	3053	3704	3120	3834	3049	3757	3010	3721	2931	3686	3033
Mowry Shale	3704	4242	3834	4349	3757	4267	3721	4222	3686	4204	3731
Muddy Sand	4242		4349	4396	4267	4316	4222	4269	4204	4249	4254
Thermopolis Shale			4396	4558	4316	4487	4269	4432	4249	4414	4306
Dakota Sand	4454	4742	4558	4640	4490	4744	4432	4680	4414	4640	4469
Lakota	4742	4792			4744	4778	4680	4720			
Morrison	4792	5381	4640	4825	4778	4920	4720	4894	4640	4859	4558
Sundance			4825	5287	4920	5205	4894	5150	4859	5136	4859
	5176	5380	5287	5488	5205	5400	5150	5336	5136	5346	5000
Nugget	5380	5490	5488	5600	5400	5520	5336	5446	5346	5458	5208
Chugwater	5490	6650	5600	6720	5520	6616	5446	6533	5458	6554	5333
Dinwoody	6650	6696	6720	6830	6616	6719	6533	6633	6554	6656	6602
Phosphoria	6696	6899	6830	7068	6719	6945	6633	6840	6656	6869	6702
Tensleep	6899		7068		6945		6840		6869		6916

Exhibit B

	AOR Well #7	AOR Well #8	AOR Well #9	AOR Well #10
ll	4901322015	4901322016	4901322110	4901322109
	Tribal C40	Tribal C-42	Tribal C44	Tribal C45
	Producer	Producer	Producer	Producer
		Temporarily Abandoned		Temporarily Abandoned
Dec-15	4901322015	4901322016	4901322110	4901322109
	8/10/2000	9/16/2000	7/3/2001	7/3/2001

	Section	Township	N/S	Range	E/W
	29	4	N	1	W
AOR Well #7	NESE	30	4 N	1	W
AOR Well #8	SESE	30	4 N	1	W
AOR Well #9	SESE	30	4 N	1	W
AOR Well #10	SESW	29	4 n	1	W

	Latitude	Longitude
	43.29116	-108.91101
AOR Well #7	43.29068	-108.91148
AOR Well #8	43.2867	-108.91724
AOR Well #9	43.28938	-108.915856
AOR Well #10	43.28377	-108.911478

	feet	
	feet	
AOR Well #7	7163	feet
	7121	feet
AOR Well #8	7145	feet
	7093	feet
AOR Well #9	7175	feet
	7114	feet
AOR Well #10	7150	feet
	7085	feet

Action	
/1/2015. Could not fill out box due to being locked.	
AOR Well #7	No Corrective Action
	N/a
	N/a
	Well status is actually SI for economics as of 03/2020. SI was not an option under drop down. Will be reactivated at $40 WCS pricing
AOR Well #8	No Corrective Action
	N/a
	N/a
	status date TA'd as of 06/2014. Cement retainer set at 6636.
AOR Well #9	No Corrective Action
	N/a
	N/a
	well status is Shut-in as of 05/2016. Will be reactivated at $55 WCS pricing
AOR Well #10	No Corrective Action
	N/a
	N/a
	Status date TA'd as of 05/2016. Cement retainer set at 6637'.

Depths measured in KB

	Casing Top (ft)	Casing Bottom (ft)	Cement Top (ft)	Cement Bottom (ft)
	20	824	20	828
	20	7121	20	7179
AOR Well #7	surface	20	837	20	838
	production	20	7163	20	7164
AOR Well #8	Surface	20	802	20	802
	production	20	7145	20	7145
AOR Well #9	Surface	12	830	12	830
	Production	12	7162	2700	7162
AOR Well #10	Surface	12	820	12	823
	production	12	7149	2200	7149

	Perf 2	Perf 3	Perf 4	Perf 5	Perf 6
	Open	open	open		
	6930	6950	7018		
	6940	6990	7044		

	Perf 1	Perf 2	Perf 3	Perf 4	Perf 5	Perf 6
AOR Well #7	Squeezed	Open	open			
	6706	6934	6958			
	6732	6954	6982			
AOR Well #8	Open	open	open	open		
	6711	6922	6942	7014		
	6721	6932	6962	7040		
AOR Well #9	open	open	open	open	open	open
	6691	6712	6720	6910	6960	7010
	6701	6716	6727	6930	6979	7032
AOR Well #10	open	open	open	open	open	
	4226	6678	6696	6875	6930	
	4237	6688	6702	6895	6935	

	Depth to Top (ft KB)	Depth to Bottom (ft KB)
	3731	
	4254	
	4306	
	4469	
	4558	
	4859	
	5000	
	5208	
	5333	
	6602	
	6702	
	6916	
AOR Well #7	0	
	3031	3743
	3743	4263
	4263	4301
	4301	4465
	4465	4640
	4640	4859
	4859	5286
	5286	5384
	5384	5493
	5493	6593
	6593	6693
	6693	6907
	6907	
AOR Well #8	0	
	3186	3880
	3880	4367
	4367	4432
	4432	4589
	4589	4640
	4640	4853
	4853	5158
	5158	5383
	5383	5497
	5497	6592
	6592	6696
	6696	6912
	6912	
AOR Well #9	0	
	3073	3778
	3778	4299
	4299	4346
	4346	4512
	4512	4804
	4804	4954
	4954	5218
	5218	5379
	5379	5491
	5491	6575
	6575	6678
	6678	6904
	6904	
AOR Well #10	0	
	2966	3686
	3686	4244
	4244	4265
	4265	4430
	4430	4733
	4733	4898
	4898	5159
	5159	5361
	5361	5472
	5472	6560
	6560	6660
	6660	6870
	6870	

Exhibit B

Wells Within 1/4 Mile Radius of the Tribal C13 that penetrate the Phosphoria and Tensleep

API10	Well Name	Status	TD	TOC	TOC Source	Top of injection zone	Corrective action ?	Comments
4901306463	Tribal C3	PA	7104	Surface	PA work in 1984	6696	Not Needed	Wellbore PA'd in 1984 per WOGCC
4901306454	Tribal C10	TA	7074	4760	Temp Survey 11/1/1947	6830	Not Needed	See attached Temp Survey
4901306469	Tribal C14	inj	7167	2444	Calculated	6719	Not Needed	1st stg cement 700 sx from 7" Shoe @ 6946'. 2nd stage 500 sx from DV tool at 3804'.
4901306460	Tribal C23	Inj	7050	2675	Temp Survey 10/16/1961	6633	Not Needed	
4901321916	Tribal C37	Oil	7198	Surface	Surface returns	6656	Not Needed	Cement returns circulated back to surface from 2nd stage during Primary cement job
4901322017	Tribal C39	Monitor Well	7179	Surface	Surface returns	6702	Not Needed	30 bbls cement returned to surface during primary cement job
4901322015	Tribal C40	SI	7163	Surface	Surface returns	6693	Not Needed	Cement returns circulated back to surface from 2nd stage during Primary cement job
4901322016	Tribal C42	TA	7145	Surface	Surface returns	6696	Not Needed	Cement returns circulated back to surface from 2nd stage during Primary cement job
4901322110	Tribal C44	SI	7175	2700	CBL Run 8/2/2001	6678	Not Needed	See attached CBL
4901322109	Tribal C45	TA	7150	2200	CBL run 7/6/2001	6660	Not Needed	See attached CBL

Exhibit B-1

HORIZONTAL - TRIBAL C 39H ST01, 12/23/2020 5:18:05 PM

MD (ftKB)	Vertical schematic (actual)
15.1	
20.0	PRIM CMT 1ST STAGE; 20.0-384.0; 7/24/2000; 355 sacks total pumped. Stage 2: tail with 180 sacks AG-300 with 2% CaCl2, 0.25 #/sack Flocele. Yield 1.15 ft^3/sack, Weight=15.8 ppg. Cement returns to surface.
383.9	CASING JOINT(S); 9 5/8; 8.92; 20.0-776.4; 756.37 PRIM CMT 1ST STAGE; 384.0-825.0; 7/24/2000; 355 sacks total pumped. Stage 1: Lead with 175 sacks HLC with 2% CaCl2, 0.25 #/sack Flocele. Yield 2.00 ft^3/sack, Weight=12.4 ppg.
825.1	CASING JOINT(S); 9 5/8; 8.92; 777.3-824.1; 46.80
828.1	CASING JOINT(S); 7; 6.34; 20.0-4,855.6; 4,835.59 Tubing; 3 1/2; 2.99; 15.0-5,536.2; 5,521.16 PRIM CMT 2ST STAGE; 20.0-6,400.0; 8/4/2000; Pump 720 sacks HLC with 5#/ sack Gilsonite, 0.25#/ sack Flocele, 0.25#/sack Kwik seal. Yield 1.97, Wt 12.4 ppg. 30 bbls cement returned to pit.
5,536.1	Cross Over 3 1/2 x 2 7/8; 3 1/2; 5,536.2-5,536.9; 0.78
5,537.1	Pump Seating Nipple; 2 7/8; 2.44; 5,536.9-5,538.0; 1.10
5,538.1	Packer nickle coated Arow Set 1-X; 2 7/8; 5,538.0-5,546.0; 7.95
5,545.9	CASING JOINT(S); 7; 6.28; 4,855.6-6,394.6; 1,538.98; ThreadLock Y/N: N
6,399.9	STAGE COLLAR; 7; 6.25; 6,394.6-6,397.3; 2.70 CASING JOINT(S); 7; 6.28; 6,397.3-7,121.0; 723.70; ThreadLock Y/N: N PRIM CMT 1ST STAGE; 6,400.0-7,179.0; 8/4/2000; 860 sacks total. Pump 140 sacks of AG-300 with 0.2% CFR-3, 0.3% HALAD 344, 0.2% HR5, 5#/Sack Gilsonite, 0.25#/ sack Flocele. Yield 1.2, WT-15.5%
6,714.9	Perf; 6,715.0-6,727.0; 9/28/2007; Supervisor: M. Dunleavy
6,727.0	
6,818.9	
6,820.9	
7,027.9	
7,084.0	
7,179.1	

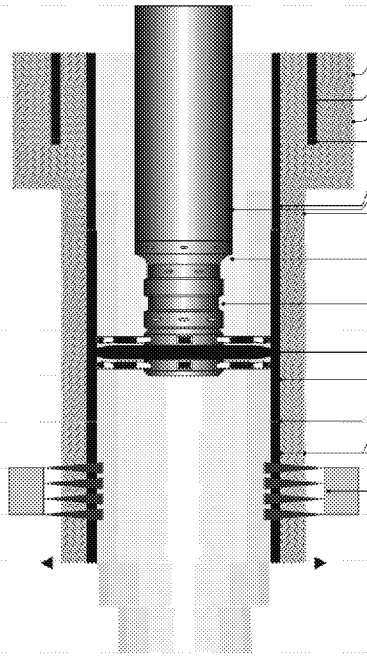

Exhibit B-2

TRIBAL C 10, 12/23/2020 3:54:06 PM

MD (ftKB)	Vertical schematic (actual)
9.8	CASING JOINT(S); 5 1/2; 4.75; 9.9-72.5; 62.60
	PRIM CMT 1ST STAGE; 10.0-92.0; 7/14/1947; Annular flow after cement job (Y/N): N
	CASING JOINT(S); 16; 14.5-91.8; 77.37
91.9	
	CASING JOINT(S); 10 3/4; 14.4-202.6; 188.15
	CASING JOINT(S); 5 1/2; 4.75; 72.5-577.3; 504.83; ThreadLock Y/N: N
100.1	CASING JOINT(S); 10 3/4; 202.6-962.4; 759.88
	PRIM CMT 1ST STAGE; 10.0-1,189.0; 7/24/1947
1,189.0	CASING JOINT(S); 10 3/4; 962.4-1,146.8; 184.35; ThreadLock Y/N: N
	CASING JOINT(S); 5 1/2; 4.75; 577.3-4,892.2; 4,314.95
	CASING JOINT(S); 5 1/2; 4.75; 4,892.2-6,349.5; 1,457.25; ThreadLock Y/N: N
4,759.8	PRIM CMT 1ST STAGE; 4,760.0-6,920.0; 11/1/1947; Annular flow after cement job (Y/N): N
	TOC recorded from Temp survey ran on 11/1/1947 after primary cement job that pumped 1000 sx
6,557.1	CASING JOINT(S); 5 1/2; 4.75; 6,349.5-6,759.3; 409.82; ThreadLock Y/N: N
	Cement Retainer; 6,557.0-6,559.0; Set CICR @ 6557'kb - Roll the hole w/ PKR fluid & Test to 300# - LD Tbg String - TA Well
6,559.1	
6,609.9	
	Perf; 6,610.0-6,620.0; 6/4/2001
6,620.1	
6,638.1	
	Perf; 6,638.0-6,644.0; 6/4/2001
6,644.0	
	CASING JOINT(S); 5 1/2; 4.75; 6,760.4-6,823.1; 62.69; ThreadLock Y/N: N
6,825.1	CASING GUIDE SHOE; 5 1/2; 4.75; 6,823.1-6,825.1; 1.96
6,919.9	
	Open hole; 6,825.0-7,047.0; 1/1/1900
6,990.2	
	Fill; 6,990.0-7,047.0; Slickline tag for fill on April 10, 2012, Scraper was ran to bottom of the casing on April 10, 2012
7,046.9	

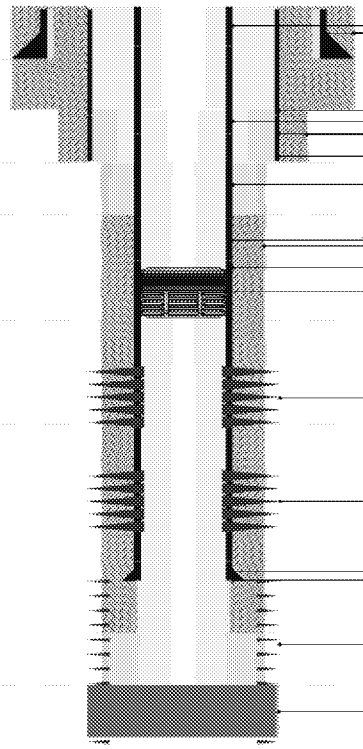

Exhibit B-2

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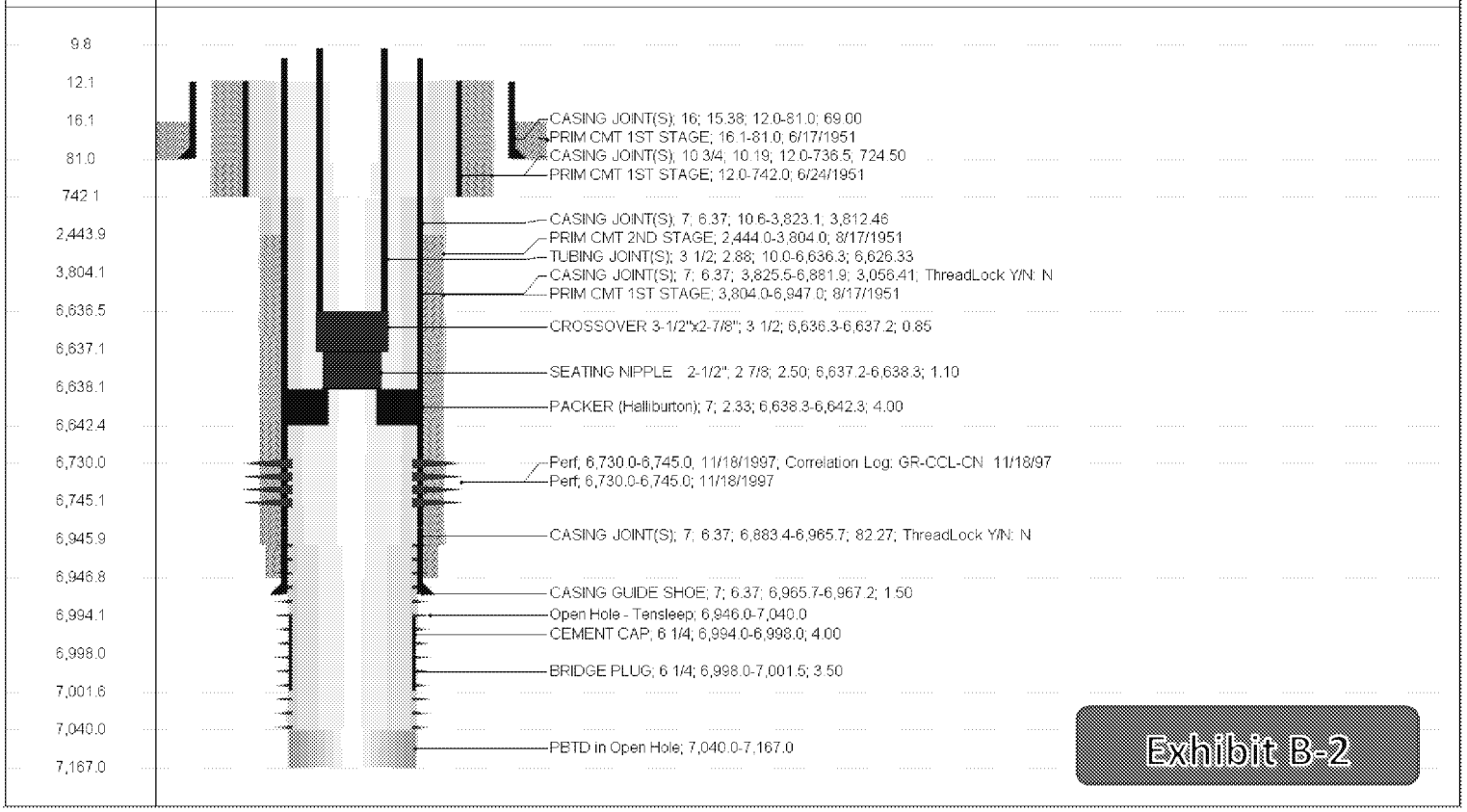


TRIBAL C 23, 12/23/2020 5:17:16 PM

MD (ftKB)	Vertical schematic (actual)
11.2	TUBING JOINT IPC; 2 7/8; 2.44; 11.3-42.3; 31.00
42.3	CASING JOINT(S); 9 5/8; 9.00; 11.0-243.3; 232.32
	PRIM CMT 1ST STAGE; 11.0-275.0; 9/15/1961
	CASING JOINT(S); 9 5/8; 9.00; 243.3-273.9; 30.57
274.9	CASING GUIDE SHOE; 9 5/8; 9.00; 273.9-275.0; 1.10
2,674.9	CASING JOINT(S); 5 1/2; 4.95; 11.0-4,313.4; 4,302.39
	TUBING JOINT(S); 2 7/8; 2.44; 42.3-6,439.3; 6,397.00
	PRIM CMT 2ND STAGE; 2,675.0-4,314.0; 10/15/1961
4,299.9	Stage Collar @ 4304'; 4,300.0; 10/13/1961
4,314.0	STAGE COLLAR; 5 1/2; 4.95; 4,313.4-4,314.5; 1.10
5,200.1	CASING JOINT(S); 5 1/2; 4.95; 4,314.5-6,764.7; 2,450.14
5,895.0	Perf; 5,895.0-5,896.0; 1/1/1963
	REMEDIAL CEMENT; 5,895.0-5,896.0; 1/2/1963
5,896.0	PRIM CMT 1ST STAGE; 5,200.0-6,824.0; 10/15/1961
6,439.3	PACKER LOCKSET Nickle Plated; 5 1/2; 6,439.3-6,443.0; 3.74
6,442.9	
6,636.2	Perf; 6,636.0-6,682.0; 10/22/1961
6,682.1	
6,754.9	CASING FLOAT COLLAR; 5 1/2; 4.95; 6,764.7-6,765.9; 1.20
	CASING JOINT(S); 5 1/2; 4.95; 6,765.9-6,820.8; 54.94
6,824.1	CASING GUIDE SHOE; 5 1/2; 4.95; 6,820.8-6,822.0; 1.20
6,839.9	Perf; 6,840.0-7,050.0; 4/14/2000; Tensleep Open Hole
7,049.9	

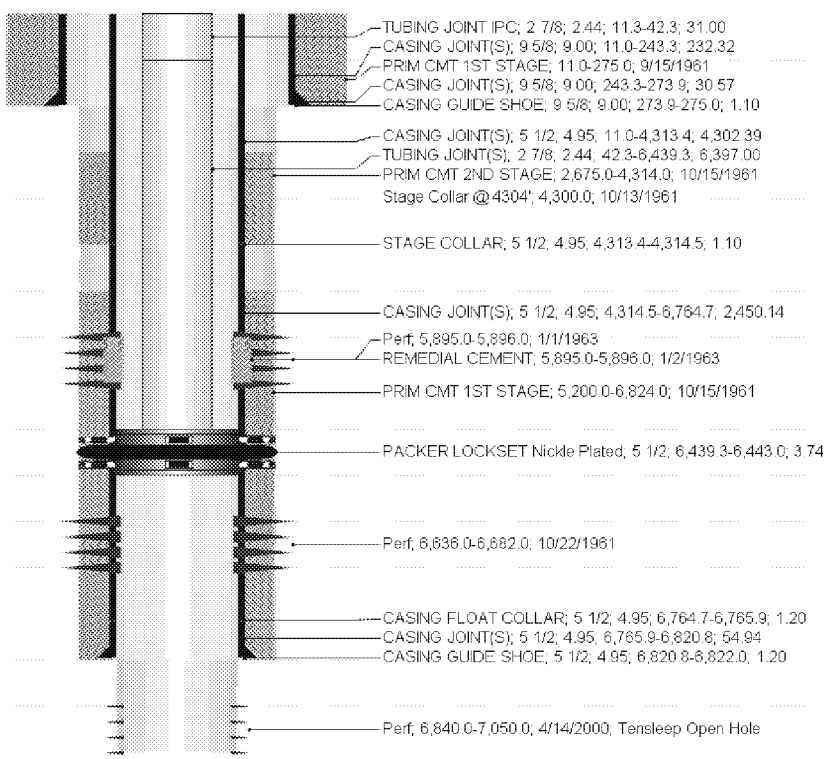


Exhibit B-2

Wellbore TRIBAL C 37 | Job <no job selected> | Date <now> | Integrity Program <no program selected>

TRIBAL C 37, 12/23/2020 5:16:13 PM

MD (ftKB)	Vertical schematic (actual)
15.4	Cross Over 3-1/2 EUE X 4-1/2 EUE; 4 1/2; 15.5-16.5; 1.00
16.1	CASING JOINT(S); 9 5/8; 8.92; 16.0-845.0; 829.00
16.4	PRIM CMT 1ST STAGE; 16.0-846.0; 11/6/1999
846.1	CASING JOINT(S); 7; 6.33; 16.1-4,881.1; 4,865.00
4,886.2	PRIM CMT 2ND STAGE; 16.0-4,886.0; 12/14/1999
6,669.9	Tubing; 3 1/2; 2.99; 16.5-6,688.8; 6,672.30
6,686.0	CASING JOINT(S); 7; 6.33; 4,883.4-5,023.4; 139.99; ThreadLock Y/N: N
6,688.6	PRIM CMT 1ST STAGE; 4,886.0-7,198.0; 12/14/1999
6,689.3	CASING JOINT(S); 7; 6.28; 5,023.4-7,145.6; 2,122.18; ThreadLock Y/N: N
6,720.5	Perf; 6,670.0-6,686.0; 12/30/1999
6,720.8	ESP - Bleeder; 3 1/2; 6,688.8-6,689.3; 0.55
6,727.0	Tubing; 3 1/2; 2.99; 6,689.3-6,720.3; 31.00
6,747.7	ESP - Check; 3 1/2; 6,720.3-6,720.9; 0.55
6,768.4	Tubing Pup Joint; 3 1/2; 6,720.9-6,727.0; 6.18
6,790.7	ESP - Pump; 5 3/8; 6,727.0-6,747.7; 20.69
6,791.3	ESP - Pump; 5 3/8; 6,747.7-6,768.3; 20.57
6,798.9	ESP - Pump; 5 3/8; 6,768.3-6,790.8; 22.46
6,821.5	ESP - Intake @ 6790'; 5 3/8; 6,790.8-6,791.3; 0.50
6,843.8	ESP-Seal Section; 5 3/8; 6,791.3-6,798.8; 7.57
6,848.1	ESP - Motor; 5 5/8; 6,798.8-6,821.5; 22.70
6,848.8	ESP - Motor; 5 5/8; 6,821.5-6,844.0; 22.45
6,879.6	Centinel Gauge; 5 5/8; 6,844.0-6,848.1; 4.10
6,879.9	Cross Over; 3 1/2; 6,848.1-6,848.6; 0.50
6,886.5	Tubing; 3 1/2; 2.99; 6,848.6-6,879.6; 31.00
6,919.9	Desander; 7; 6,879.6-6,886.5; 6.91
6,980.3	Perf; 6,880.0-6,920.0; 12/23/1999
6,980.6	Tubing; 3 1/2; 2.99; 6,886.5-6,980.2; 93.70
7,125.0	Bull Plug; 3 1/2; 6,980.2-6,980.7; 0.50
7,198.2	ABANDONMENT PLUG; 7,125.0-7,198.0; 12/14/1999
	PRIM CMT 1ST STAGE (plug); 7,125.0-7,198.0; 12/14/1999
	CASING FLOAT COLLAR; 7; 7,145.6-7,146.8; 1.20
	CASING JOINT(S); 7; 6.28; 7,146.8-7,191.4; 44.61; ThreadLock Y/N: N

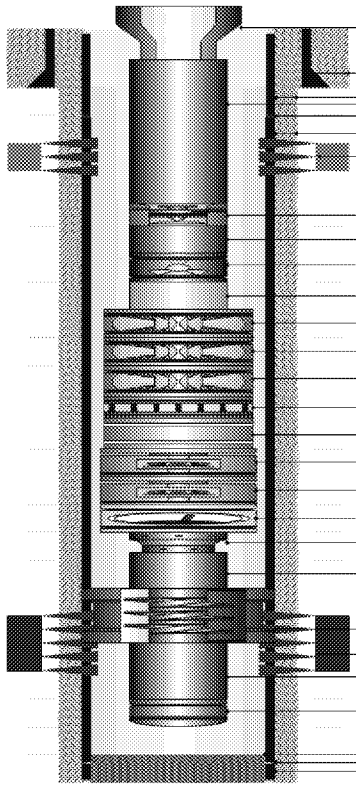


Exhibit B-2

HORIZONTAL - TRIBAL C 40H ST01, 12/23/2020 5:19:33 PM

MD (ftKB)	Vertical schematic (actual)
0.0	
18.7	Tubing sub; 3 1/2; 2.99; 18.7-24.3; 5.60; rerun CASING JOINT(S); 9 5/8; 8.92; 20.0-788.6; 768.56 Surface Casing Cement; 20.0-837.7; 8/10/2000; Cemented to surface with 355 sxs
24.3	CASING JOINT(S); 9 5/8; 8.92; 789.5-836.7; 47.23; ThreadLock Y/N: N CASING GUIDE SHOE; 9 5/8; 8.92; 836.7-837.7; 1.00
837.9	CASING JOINT(S); 7; 6.34; 19.9-4,668.0; 4,648.00 Production Casing Cement; 20.0-4,683.0; 8/24/2000; Cemented 2nd stage to surface with 960 sxs Tubing; 3 1/2; 2.99; 24.3-6,251.5; 6,227.17; rerun
4,171.9	
4,640.1	
4,858.9	CASING JOINT(S); 7; 6.34; 4,668.0-6,427.6; 1,759.68; ThreadLock Y/N: N Production Casing Cement; 4,683.0-7,165.0; 8/24/2000; Cemented 1st stage with 150 sxs
6,251.3	ESP drain; 3 1/2; 6,251.5-6,252.0; 0.55; new baker centerlift drain Tubing; 3 1/2; 2.99; 6,252.0-6,284.0; 31.95; rerun
6,284.1	ESP - Check; 3 1/2; 6,284.0-6,284.5; 0.55; new baker centerlift check
6,290.7	Tubing sub; 3 1/2; 2.99; 6,284.5-6,290.7; 6.15; rerun ESP - Discharge; 3 1/2; 6,290.7-6,291.3; 0.61; new novomet 535 sreies bolt on
6,303.5	ESP - Pump; 5; 6,291.3-6,303.6; 12.35; new Novomet S16 stages 34 ESP - Pump; 5; 6,303.6-6,316.0; 12.35; new Novomet S16 stages 34
6,328.4	ESP - Pump; 5; 6,316.0-6,328.3; 12.35; new Novomet S16 stages 34 ESP - Intake; 5; 6,328.3-6,329.5; 1.21; New N535 CR1 .98" S14
6,338.6	ESP- Seal; 5; 6,329.5-6,338.7; 9.17; new N535TMP ESP - Seal; 5; 6,338.7-6,347.7; 9.02; new N535TMP
6,370.7	ESP - Motor; 5; 6,347.7-6,370.6; 22.88; New 512PM620 Pressure / Temperature Sensor; 5; 6,370.6-6,372.7; 2.10; New NDS2 406 DES2 5800 psi
6,384.8	CASING JOINT(S); 7; 6.34; 6,430.3-7,118.4; 688.05; ThreadLock Y/N: N Cement Squeeze; 6,525.0-6,732.0; 2/24/2011; Pumped 150 sk cement squeeze thru cement retainer, leaving 2 bbls of cement on top of retainer
6,671.9	PBR; 5; 4.41; 6,739.8-6,756.2; 16.40
7,024.9	Casing Joints; 5; 4.41; 6,760.2-7,023.4; 263.17
7,165.0	
7,450.1	

Exhibit B-2

TRIBAL C 42, 12/23/2020 5:20:40 PM

MD (ftKB)	Vertical schematic (actual)
21.0	CASING JOINT(S); 9 5/8; 8.92; 21.0-773.5; 752.46
	PRIM CMT 1ST STAGE; 21.0-802.0; 9/18/2000
801.8	CASING JOINT(S); 9 5/8; 8.92; 774.4-800.9; 26.45; ThreadLock Y/N: N
	CASING JOINT(S); 7; 6.25; 28.3-4,314.2; 4,285.89; ThreadLock Y/N: N
	PRIM CMT 2ND STAGE; 21.0-6,400.0; 10/2/2000
6,399.9	CASING JOINT(S); 7; 6.15; 4,314.2-6,399.8; 2,085.63; ThreadLock Y/N: N
6,629.9	Sand plug; 6,630.0-6,636.0; Three sacks of sand.
6,636.2	Cement Retainer; 6,636.0-6,640.0; Weatherford CICR / Set by dusty Watts.
6,640.1	
6,711.0	Perf; 6,711.0-6,721.0; 6/19/2001
6,721.1	CASING JOINT(S); 7; 6.15; 6,402.0-7,099.7; 697.65; ThreadLock Y/N: N
	PRIM CMT 1ST STAGE; 6,400.0-7,146.0; 10/2/2000
6,921.9	Perf; 6,922.0-6,932.0; 10/13/2000
6,932.1	
6,941.9	Perf; 6,942.0-6,962.0; 10/13/2000
6,961.9	Perf; 6,922.0-7,006.0; 7/15/2013
7,005.9	
7,014.1	Perf; 7,014.0-7,040.0; 7/15/2013
7,040.0	
7,092.8	ABANDONMENT PLUG; 7,093.0-7,146.0; 10/2/2000
	CASING FLOAT COLLAR; 7; 6.13; 7,099.7-7,100.6; 0.90
7,145.0	CASING JOINT(S); 7; 6.15; 7,100.6-7,145.2; 44.61; ThreadLock Y/N: N
7,146.0	

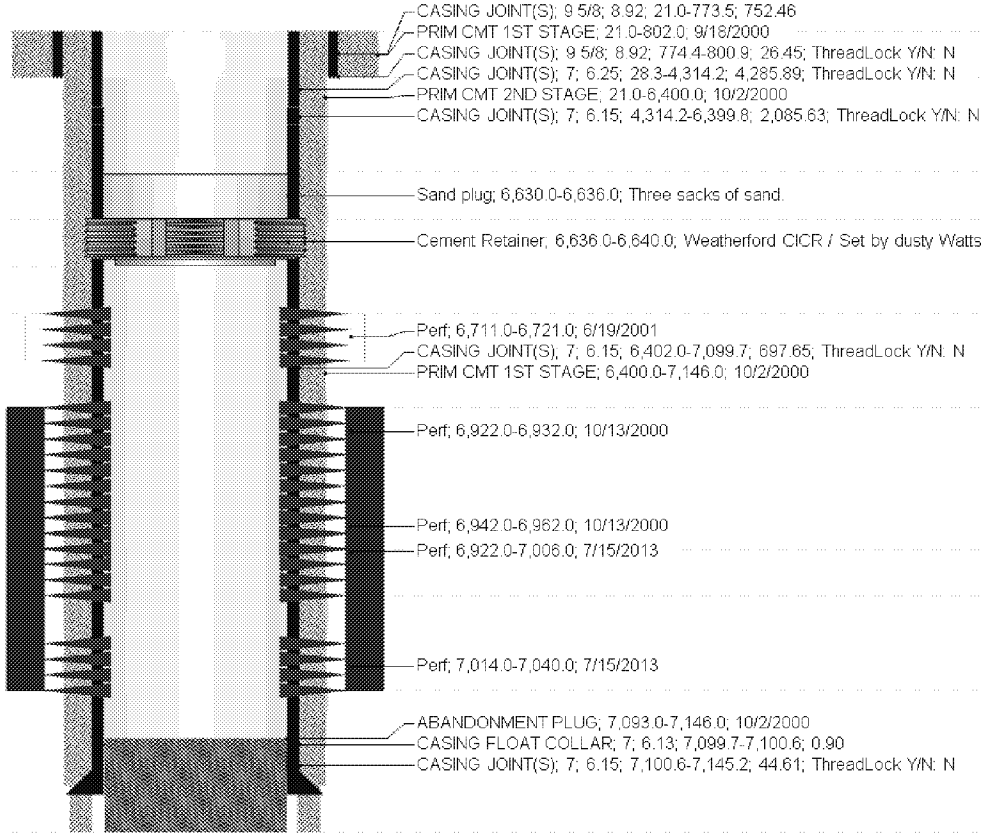
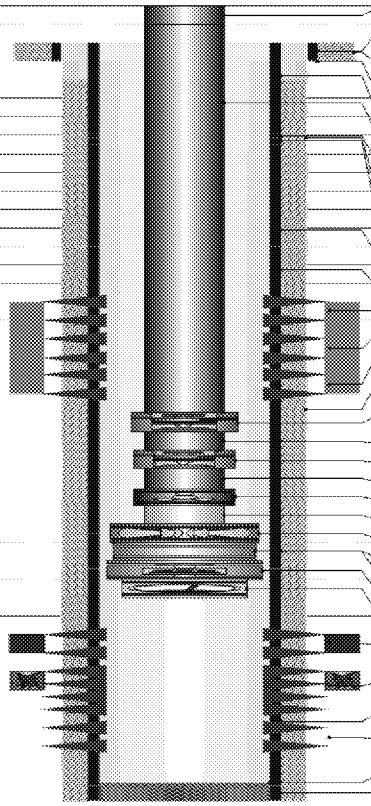


Exhibit B-2

TRIBAL C 44, 12/23/2020 5:24:30 PM

MD (ftKB)	Vertical schematic (actual)
3.6	TENSLEEP (drill)
830.1	
3,071.9	FRONTIER (final)
4,512.1	MUDDY (final)
4,804.1	DAKOTA (final)
5,217.8	UPPER LAKOTA (final)
6,356.0	MORRISON (final)
6,678.1	SUNDANCE (final)
6,701.1	GYP SPRINGS (final)
6,715.9	NUGGET (final)
6,727.0	DINWOODY (final)
6,773.3	PHOSPHORIA (final)
6,803.8	
6,834.6	
6,861.9	
6,891.1	
6,903.9	TENSLEEP (final)
6,930.1	
6,972.1	
7,009.8	
7,065.0	
7,174.9	



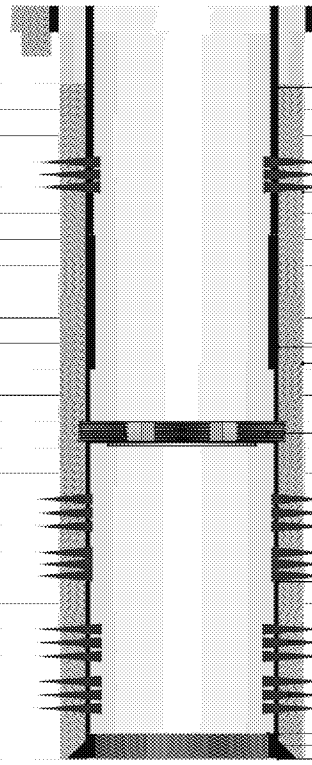
Tubing; 2 7/8; 2.44; 0.0-3.6; 3.62
CASING JOINT(S); 9 5/8; 8.92; 12.0-781.6; 769.60
PRIM CMT 1ST STAGE; 12.0-830.0; 7/3/2001; Annular flow after cement job (Y/N): N
Excess volume measured from: CALIPER HOLE
CASING JOINT(S); 9 5/8; 8.92; 782.6-829.0; 46.40
Casing Joints; 7; 6.15; 12.0-4,501.5; 4,489.50
Tubing; 2 7/8; 2.44; 3.6-6,772.3; 6,768.66
PUP JOINT; 7; 6.15; 4,501.5-4,525.3; 23.75; ThreadLock Y/N: N
PRIM CMT 2ND STAGE; 2,700.0-6,356.0; 7/28/2001; Annular flow after cement job (Y/N): N
CASING JOINT(S); 7; 6.15; 4,525.3-4,571.6; 46.30
CASING JOINT(S); 7; 6.15; 4,571.6-6,347.7; 1,776.12; ThreadLock Y/N: N
CASING JOINT(S); 7; 6.15; 6,350.2-6,851.7; 501.49
Phosphoria Perfs; 6,691.0-6,701.0; 12/5/2001
Phosphoria Perfs; 6,712.0-6,716.0; 12/5/2001
Phosphoria Perfs; 6,720.0-6,727.0; 12/5/2001
PRIM CMT 1ST STAGE; 6,356.0-7,175.0; 7/28/2001; Annular flow after cement job (Y/N): N
Plainsman tubing drain; 3.88; 2.47; 6,772.3-6,773.4; 1.10; 5 srews x 800 psi/screw: 4000 burst
Tubing; 2 7/8; 2.44; 6,773.4-6,803.4; 30.00
ESP - Bleeder; 3.67; 2.44; 6,803.4-6,804.0; 0.58
Tubing; 2 7/8; 2.44; 6,804.0-6,834.1; 30.10
ESP - Check; 3.67; 2.44; 6,834.1-6,834.6; 0.58
Tubing Pup Joint; 2 7/8; 2.44; 6,834.6-6,840.9; 6.28
ESP - Pump; 5.38; 6,840.9-6,861.8; 20.91
PUP JOINT; 7; 6.15; 6,851.7-6,878.3; 26.60
ESP-Seal Section; 5.13; 6,861.8-6,868.7; 6.89
ESP - Motor; 5.62; 6,868.7-6,891.2; 22.45
Centinel Gauge; 4 1/2; 6,891.2-6,895.3; 4.10
Tensleep Perfs; 6,910.0-6,930.0; 8/3/2001; Correlation Log: GR-N
Tensleep Perfs; 6,960.0-6,979.0; 11/16/2009; Correlation Log: GR-N
CASING JOINT(S); 7; 6.15; 6,878.3-7,122.6; 244.30
Tensleep Perfs; 7,010.0-7,032.0; 11/16/2009; Correlation Log: GR-N
Cement Plug; 7,114.0-7,175.0; 7/28/2001
CASING JOINT(S); 7; 6.15; 7,123.6-7,170.0; 46.44

Exhibit B-2

Wellbore TRIBAL C 45 | Job <no job selected> | Date <now> | Integrity Program <no program selected>

TRIBAL C 45, 12/23/2020 5:32:07 PM

MD (ftKB)	Vertical schematic (actual)
0.0	Tensleep (drill)
12.1	
823.2	
823.8	
2,200.1	
3,055.1	Frontier (final)
4,220.1	Muddy (final)
4,226.0	
4,236.9	
4,432.1	Dakota (final)
4,732.9	Morrison (final)
4,898.0	SUNDANCE (final)
5,149.9	
5,160.1	Gyp Springs (final)
5,360.9	Nugget (final)
6,349.1	
6,562.0	Dinwoody (final)
6,637.1	
6,639.1	
6,662.1	Phosphoria (final)
6,678.1	
6,688.0	
6,695.9	
6,702.1	
6,870.1	Tensleep (final)
6,875.0	
6,895.0	
6,930.1	
6,935.0	
7,101.0	
7,149.9	



CASING JOINT(S); 9 5/8; 8.92; 12.0-771.3; 759.32
PRIM CMT 1ST STAGE; 12.0-823.8; 6/16/2001; Annular flow after cement job (Y/N): N
Hours circulated between stages: 1
Pressure before cementing: 200
Returns: GOOD
Time cementing mixing started: 13:30
CASING JOINT(S); 9 5/8; 8.92; 772.3-819.4; 47.10
CASING JOINT(S); 7; 6.37; 12.0-4,674.1; 4,662.11
Perf; 4,226.0-4,237.0; 4/20/2017; ran CBL-GR-CCL strip f/ 5200' up to 3500' & Perforated the muddy
PRIM CMT 2ND STAGE; 2,200.0-6,349.0; 7/5/2001; Annular flow after cement job (Y/N): N
Hours circulated between stages: 3
Pressure before cementing: 750
Excess volume measured from: logs
CASING JOINT(S); 7; 6.28; 4,674.1-6,349.0; 1,674.89
PRIM CMT 1ST STAGE; 5,150.0-7,150.0; 7/5/2001; Annular flow after cement job (Y/N): N
Hours circulated between stages: 2.5
Excess volume measured from: logs
Cement Retainer; 6,637.0-6,639.0; KLX CICR
Perf; 6,678.0-6,688.0; 2/5/2002
Perf; 6,696.0-6,702.0; 2/5/2002
CASING JOINT(S); 7; 6.350.5-7,099.0; 748.50
Perf; 6,875.0-6,895.0; 7/7/2001; Correlation Log: HIGH RESOLUTION INDUCTION
Perf; 6,875.0-6,895.0; 5/7/2001
Perf; 6,930.0-6,935.0; 7/7/2001; Correlation Log: HIGH RESOLUTION INDUCTION
Perf; 6,930.0-6,935.0; 5/7/2001
CASING FLOAT COLLAR; 7; 7,099.0-7,100.0; 1.00
ABANDONMENT PLUG; 7,101.0-7,150.0; 7/5/2001
CASING JOINT(S); 7; 6.28; 7,100.0-7,149.0; 49.00
CASING FLOAT SHOE; 7; 7,149.0-7,150.0; 1.00

Exhibit B-2

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VIII
999 18th STREET - SUITE 500
DENVER, COLORADO 80202-2466

AUG 12 1997

Ref: 8ENF-T

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Eugene M. Grant
Regulatory Coordinator
Rocky Mountain Region
Marathon Oil Company
1501 Stampede Avenue
Cody, WY 82414-4721

Re: UNDERGROUND INJECTION CONTROL (UIC)
Allowable Maximum Injection Pressures
Steamboat Butte Field
Fremont County, WY

Dear Mr. Grant:

This letter is being sent as a reminder of the current allowable surface injection pressures for Marathon's injection wells in the Steamboat Butte Field on the Wind River Indian Reservation in Wyoming. The allowable injection pressures are shown below:

Well Name	EPA Number	Allowable Pressure
Nugget Injector		
Tribal CI-24	WY2621-02137	1033 psig
Tribal CI-1	WY2000-02145	1360 psig
Tribal EI-14	WY2000-02131	1400 psig
Phosphoria Injector		
Brinkerhoff #6	WY2000-02134	2255 psig
Tribal CI-22	WY2000-02142	2200 psig
Tribal CI-23	WY2000-02139	2300 psig
Tribal EI-26	WY2000-02129	2190 psig
Tensleep Injector		
Brinkerhoff #4	WY2000-02133	1835 psig
Tribal CI-27	WY2000-02146	1875 psig
Tribal CI-15	WY2000-02140	1825 psig
Tribal CI-30X	WY2000-02143	1865 psig
Tribal CI-31	WY2000-02138	1900 psig
Tribal EI-30	WY2000-02141	1860 psig
Tribal S-1	WY2000-02130	1805 psig

Exhibit C

The pressure limits shown above were calculated using formation fracture gradients of 0.70 psi/ft for the Nugget (except well CI-24 which was permitted using a gradient of 0.638); 0.77 psi/ft for the Phosphoria; and 0.70 psi/ft for the Tensleep. These gradients were obtained from a step rate test of the Nugget; and fracture stimulation treatments of the Phosphoria and Tensleep performed in three separate wells during 1989-1991 by the previous operator of the field, Chevron USA. Maximum pressures were calculated using the formula shown below:

$$Pm = [FG - 0.433\ (SG)]\ d$$

Where: Pm = maximum surface injection pressure at wellhead (psig)
FG = fracture gradient (psi/ft)
SG = specific gravity of injected fluid (1.004)
d = depth to top of injection perforations

These injection pressures are recorded in our computer data base and will be available for use during field inspections in order to verify that allowable injection pressures are not being exceeded, and for comparison with maximum pressures recorded on Annual Monitoring Reports. If you require a higher injection pressure for continued operation of a well(s), you may conduct a step-rate test of the injection zone and request an increase based on the test results. However, this test may, or may not, indicate that a higher injection pressure can be approved for the well(s).

If you have any questions concerning this letter, or do not agree with the listed pressure limits, you may contact John Carson at (303) 312-6203. Also, please direct all correspondence to the attention of John Carson at Mail Code 8ENF-T.

Sincerely,

Sharon L. Kercher, Director
Technical Enforcement Program

cc: Mr. Stuart Cerovski
Bureau of Land Management
Lander resource Area
P.O. Box 589
Lander, WY 82520-0589

Exhibit C

SUPERIOR PRODUCTION LOGGING

EPA "RTS" Log

Company Marathon Oil Co.
Well Tribal C-#13
Field Steamboat Butte
County Fremont
State Wyoming

Company Marathon Oil Co.
Well Tribal C-#13
Field Steamboat Butte
County Fremont State Wyoming

Location: API # : 49-013-06464

994' FSL & 320' FEL

SEC 30 TWP 4N RGE 1W

Other Services

Permanent Datum	Ground Level	Elevation	5751'
Log Measured From	Kelly Bushing	13'	
Drilling Measured From	Kelly Bushing		

Elevation
K.B. 5764'
D.F.
G.L. 5751'

Date	6-29-2020	Recorded By:	David Shier
Type Log	EPA "RTS" Log	Assisted By:	Jim Alexander
Depth Driller	7051'	Interpreted By:	Jim Alexander
P.B.T.D	6934'	Witnessed By:	
Depth Logger	6910'	Witnessed By:	
Top Log Interval	6150'		
Type Fluid In Hole	Water		
Meter Injection Rate	511 B/D		
Casing Rate Logger	511 B/D		
Tubing Rate Logger	521 B/D		
Tubing Pressure	50 PSI		
Annulus Rate			
Annulus Pressure			
Max. Recorded Temp.	122.4 Deg.		
Tool Size (O.D.)	1 3/8"		
Unit #	#118		

Borehole Record				Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
				3 1/2"	TBG	0'	6608'

Casing Record	Size	Wgt/Ft	Top	Bottom
Surface String	16"		0'	52'
Prot. String	10 3/4"		0'	698'
Production String	7"	23#	0'	6858'
Liner				

<<< Fold Here >>>

All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

Conclusion:

This log was run to identify the presence or absence of vertical fluid movement behind the casing near injection perforations.

It should be noted that the tool string was setup with two gamma ray detectors, one below and one above the ejector for better detection of any channeling.

The Velocity Profile shows 95% of the ejected fluid exiting the Tensleep open hole between 6870'-6881', with 5% fluid flow at 6904'. The Dynamic Temperature Survey indicates possible fluid flowing past TDL of 6910' inside the open hole.

The channel check performed at 6662' (bottom detector) and 6651' (top detector) show no indication of upward channeling.

Correlated To SPL Log Dated 11-30-2009

Exhibit D

PERF'S: Phosphoria: 6665'-6690'
Tensleep: 6861'-7051' (open Hole)

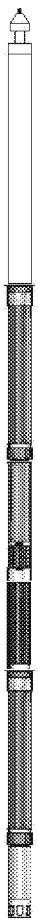
PRODUCING WELL:

FLOWING ☐ ROD PUMP ☐ ESP ☐ Y tool? Yes ☐ No ☐

Tubing Pressure	Vac.	Casing Pressure		Fluid Level (CSG)	

Metered Prod. Rate		BWPD		BOPD		Gas (MCF)
Downhole Rates		BWPD		BOPD		Gas (MCF)

Sensor	Offset (ft)	Schematic	Description	Length (ft)	O.D. (in)	Weight (lb
			13/8ropesocket-1 1 3/8 rope socket	1.00	1.38	1.00
			Sinker-SIE1.38 Sinker Bar	5.00	1.38	25.00
DET	12.98		TRDET-ProbePoss (Poss0704334)	3.83	1.38	10.00
			TREJCT-Probe (ProbeEjector)	2.63	1.38	9.00
CCL	6.25		CCL-Probe (001)	1.90	1.38	5.00
			TRDET #2 -Probe (neg070432)	3.83	1.38	10.00
DET#2	2.31					
TEMP	0.08		TEMP-Tek-co (001) 1.38	1.56	1.38	3.00

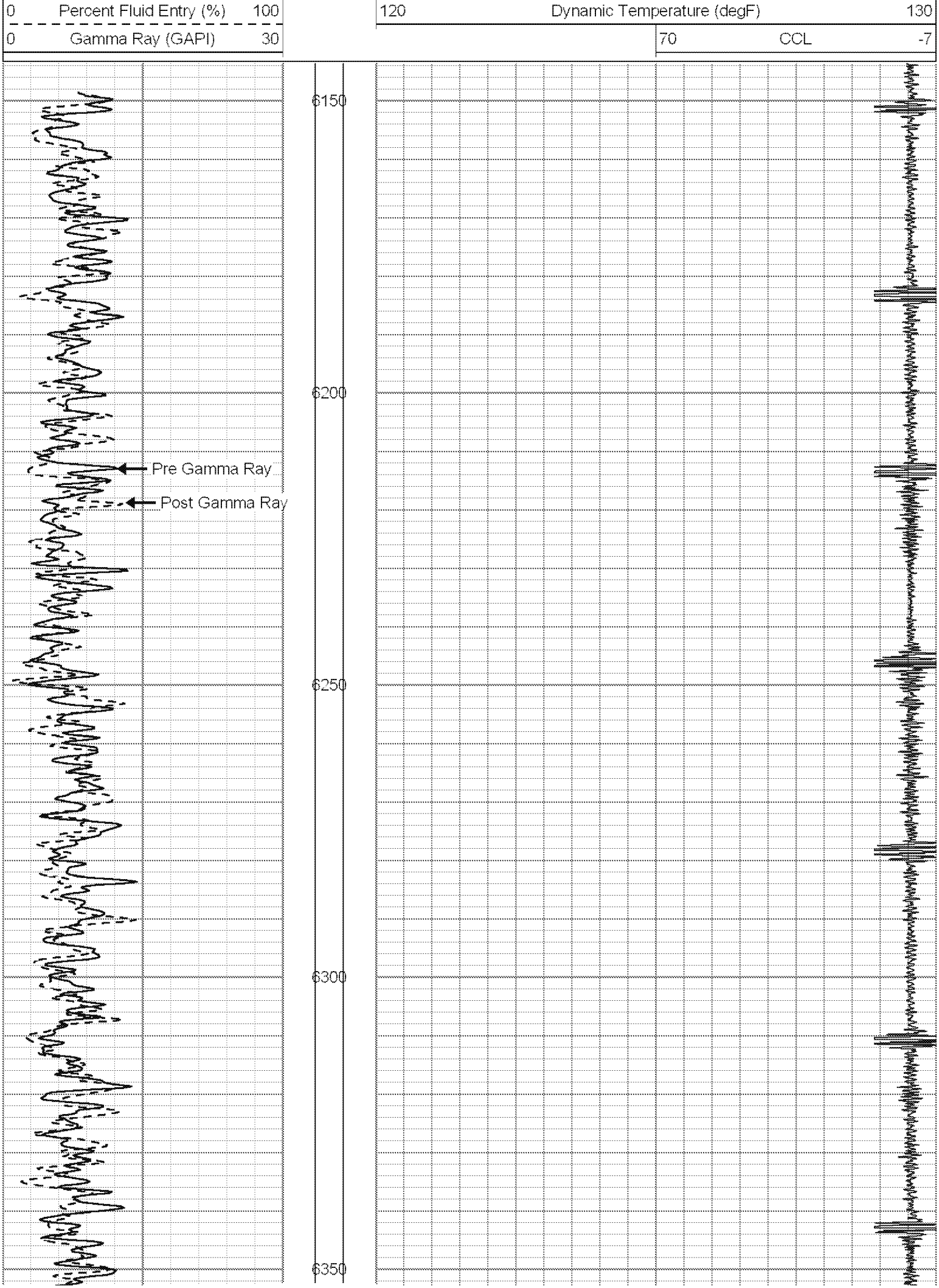


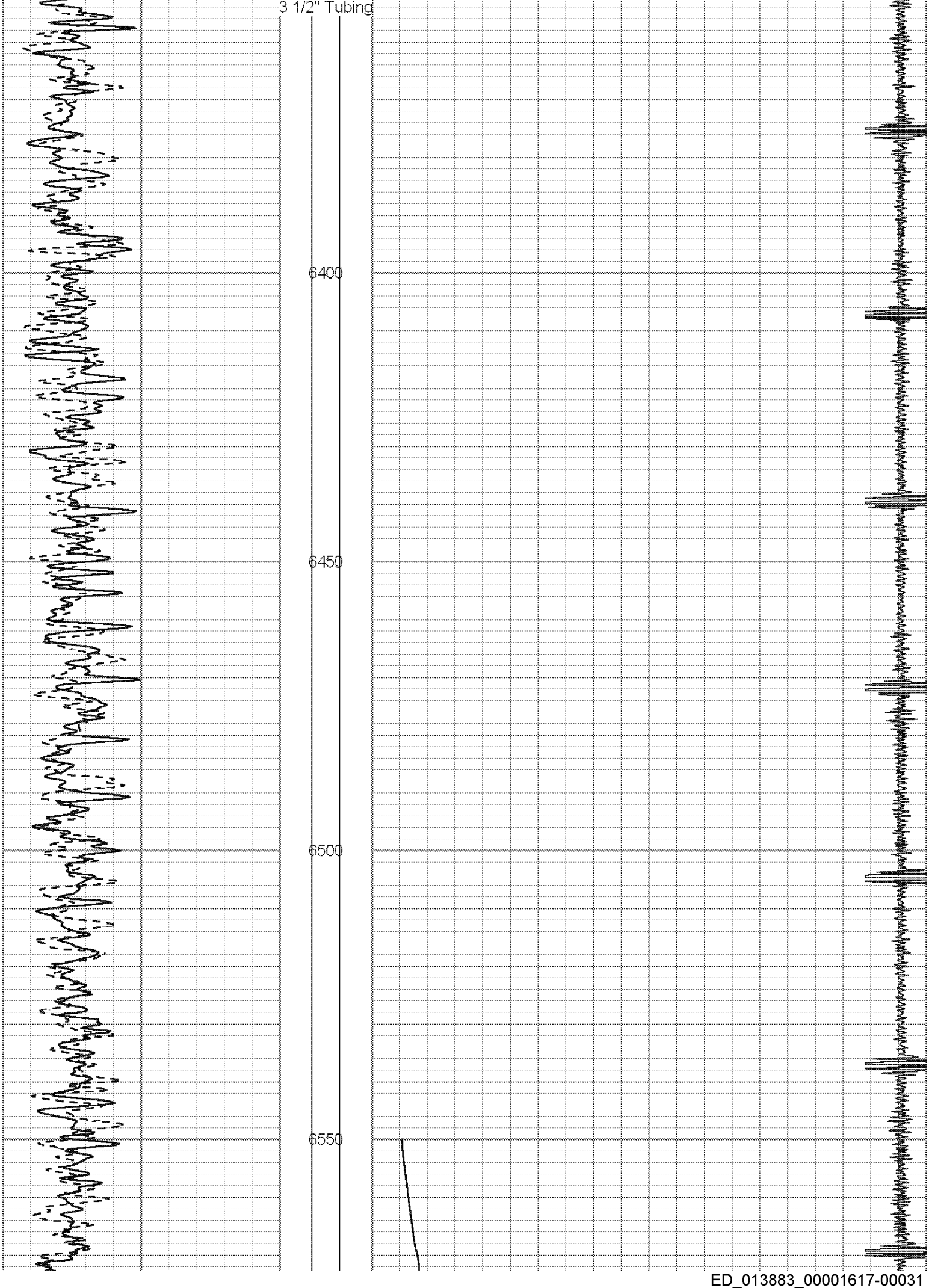
Dataset: final tribal c-#13 6-29-2020.db: field/well/run1/pass1
Total length: 19.75 ft
Total weight: 63.00 lb
O.D.: 1.38 in

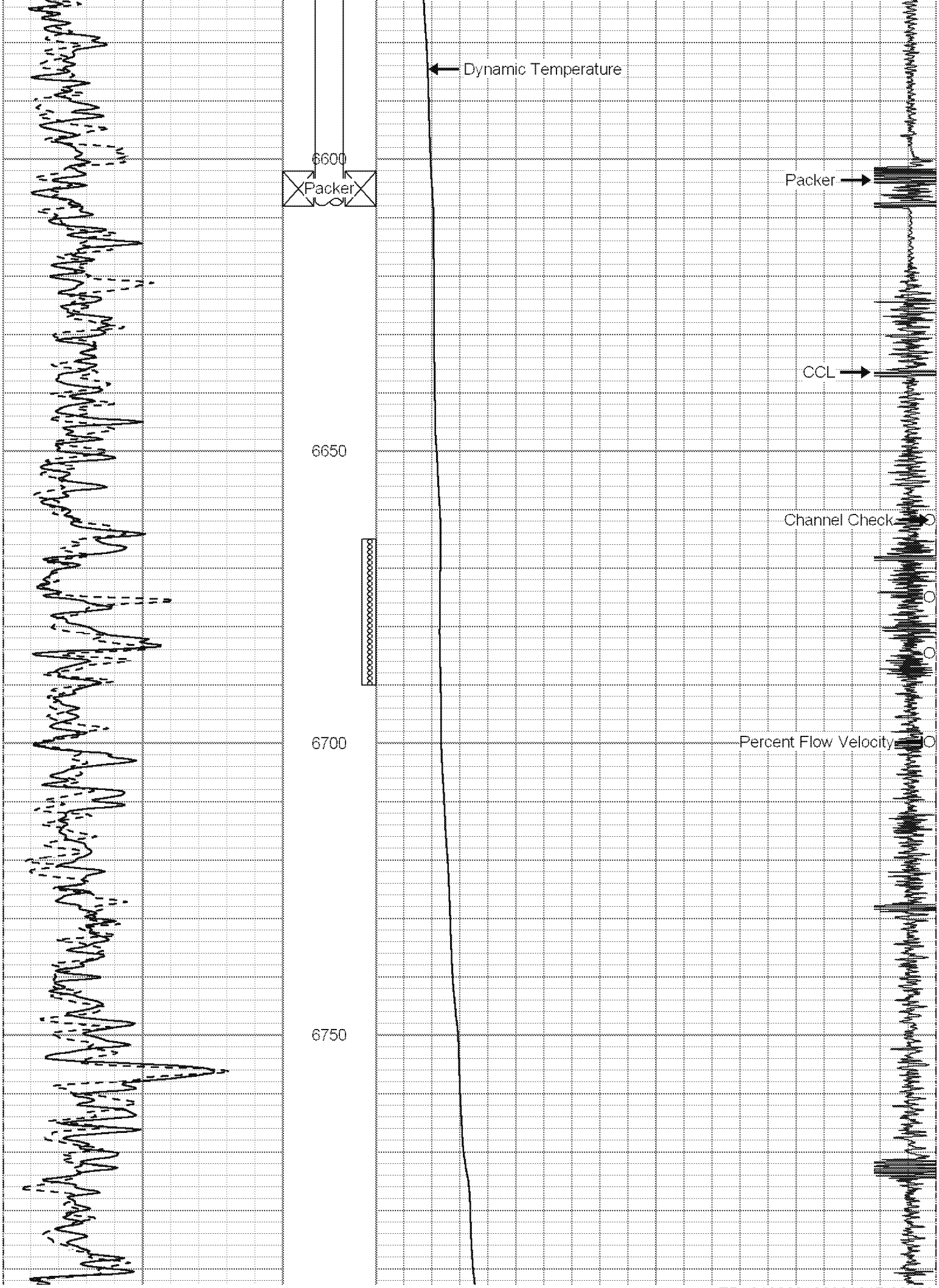
Database File c:\warrior\data\final tribal c-#13 6-29-2020.db
Dataset Pathname Merge1
Presentation Format trccomp
Dataset Creation Mon Jun 29 11:16:46 2020
Charted by Depth in Feet scaled 1:240

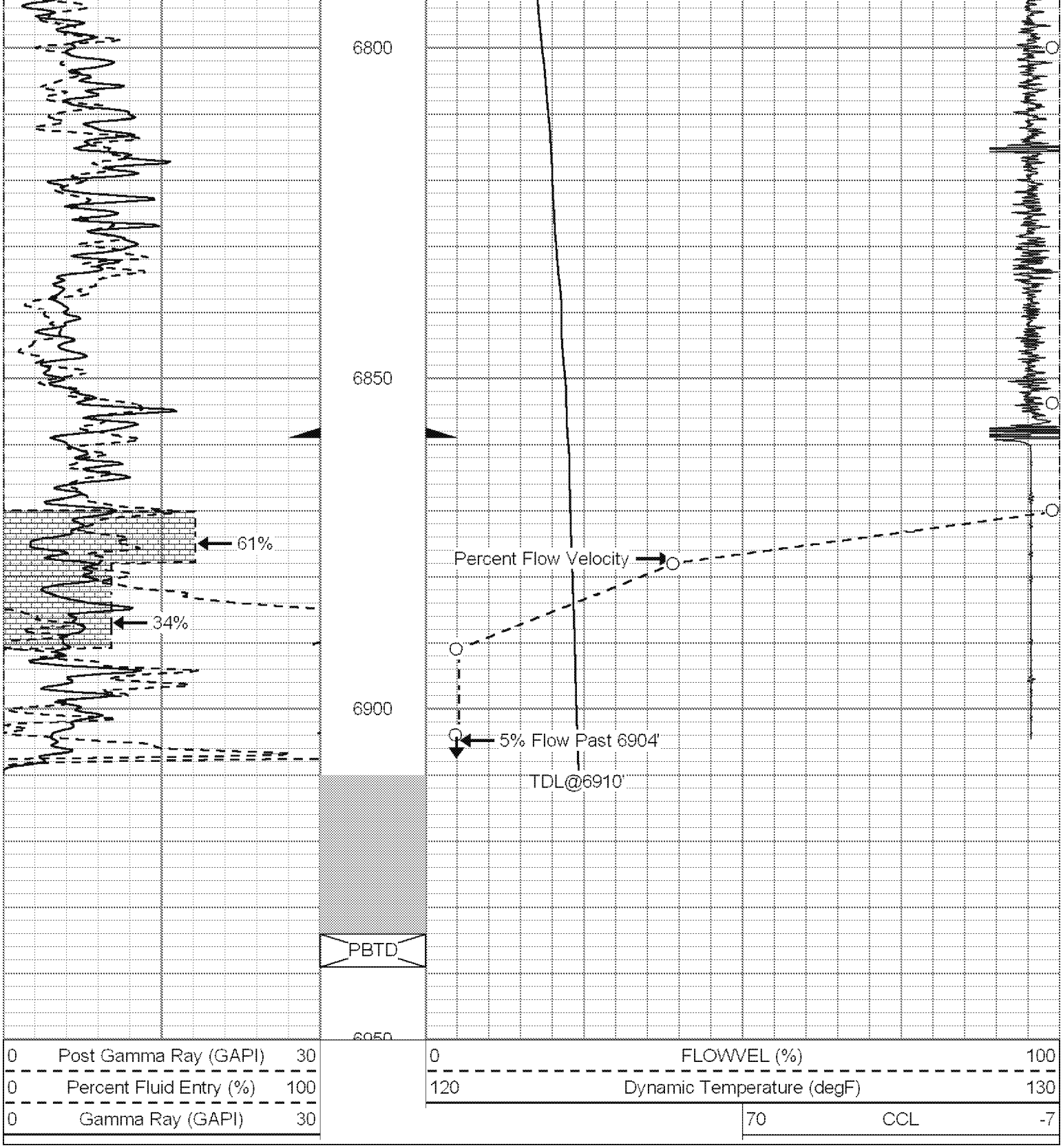
Exhibit D

0 Post Gamma Ray (GAPI) 30 | 0 FLOWVEL (%) 100


0 Percent Fluid Entry (%) 100
0 Gamma Ray (GAPI) 30
120 Dynamic Temperature (degF) 130
70 CCL -7
6150
6200
6250
6300
6350
Pre Gamma Ray
Post Gamma Ray


3 1/2" Tubing
6400
6450
6500
6550


Dynamic Temperature
6600
Packer
Packer
CCL
6650
Channel Check
6700
Percent Flow Velocity
6750



Velocity Shot Data

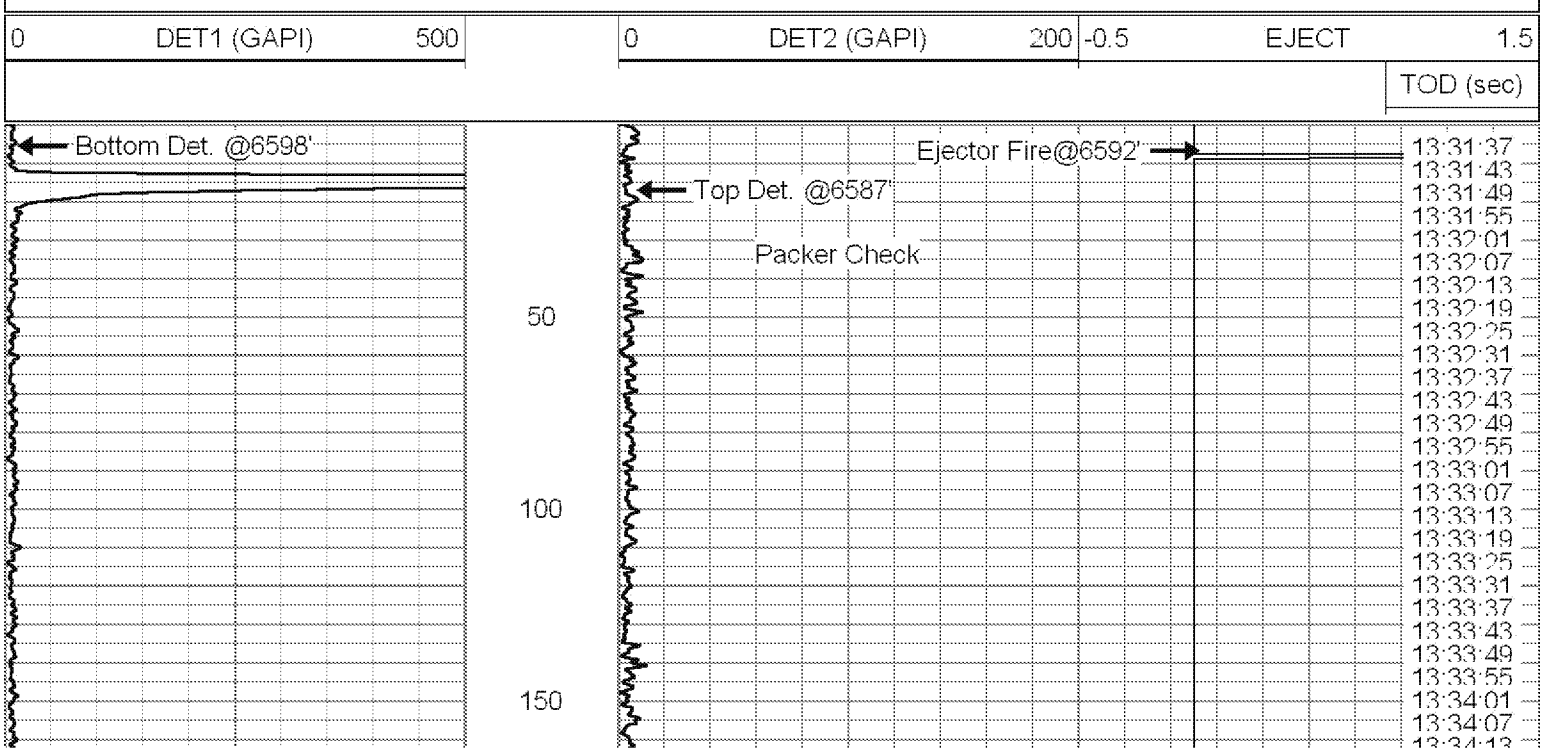
Exhibit D

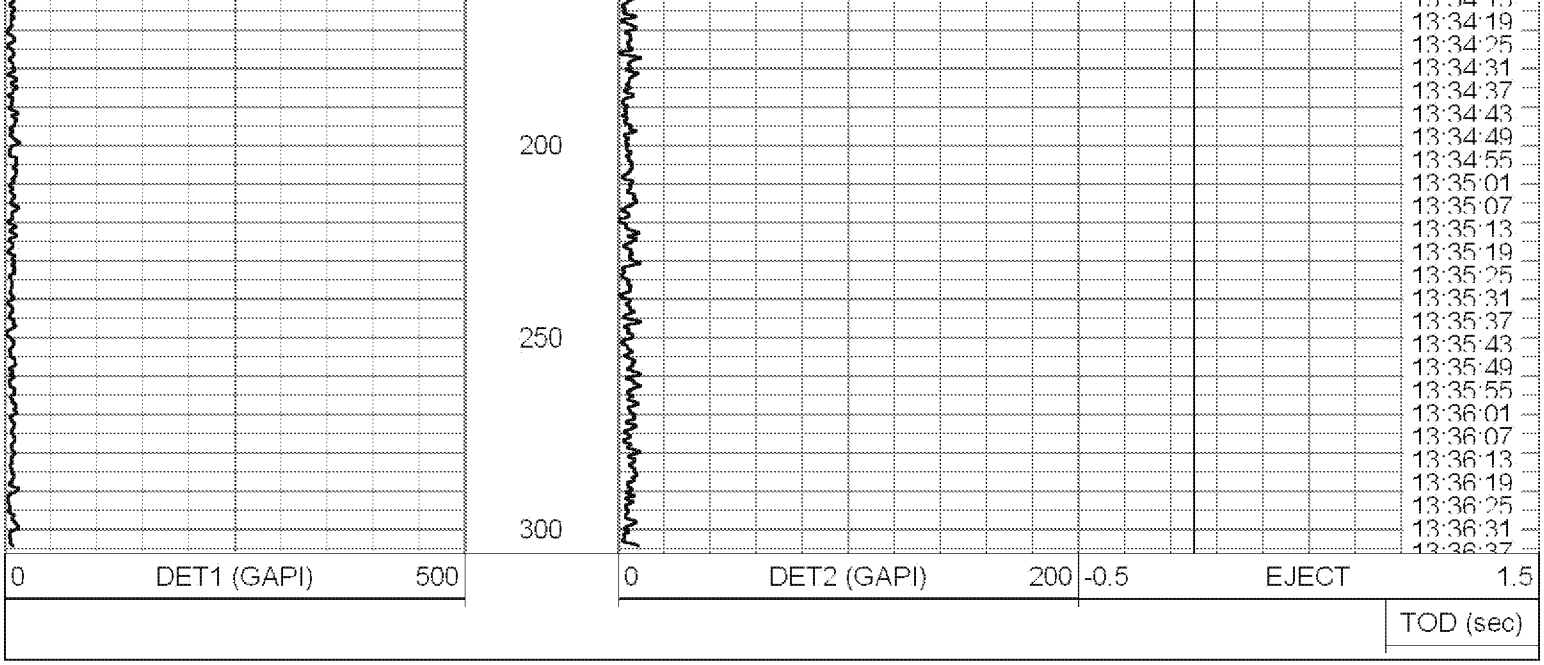
Pass No	Depth	FT.Traveled	Sec.	Rate B/D	Per. FLow	Comments
5	6908'	6'				Single Detector Not Used See Profile #1
6-7	6903'-6904'	1'	115 Sec.	28 B/D	5%	Log Shot #5 on Depth (profile #1)
8-9	6890'-6891'	1'	115 Sec.	28 B/D	5%	Shot Logged On Depth (profile #2)
10-11	6871'-6878'	7'	107 Sec.	212 B/D	28%	Shot Logged On Depth (profile #3)

12	6870'	6'	34 Sec.	538 B/D	100%	Single Detector
13	6854'	6'	34 Sec.	538 B/D	100%	Sinble Detector (Casing Shoe Check)
14	6800'	6'	34 Sec.	538 B/D	100%	Single Detector
15	6700'	6'	34 Sec.	538 B/D	100%	Single Detector
16	6685'	6'	34 Sec.	538 B/D	100%	Single Detector
17	6675	6'	34 Sec.	538 B/D	100%	Single Detector
18	6662'	6'	34 Sec.	538 B/D	100%	Single Detector
19	6662'	6'				Channel Check
20						Logging Pass After Channel Check
22	6640-6654'	14'	93 Sec.	511 B/D		Casing Drop Check
23	6550-6570'	20'	23 Sec.	521 B/D		Tubing Drop Check (Polycore)
24	6598'					Packer Check

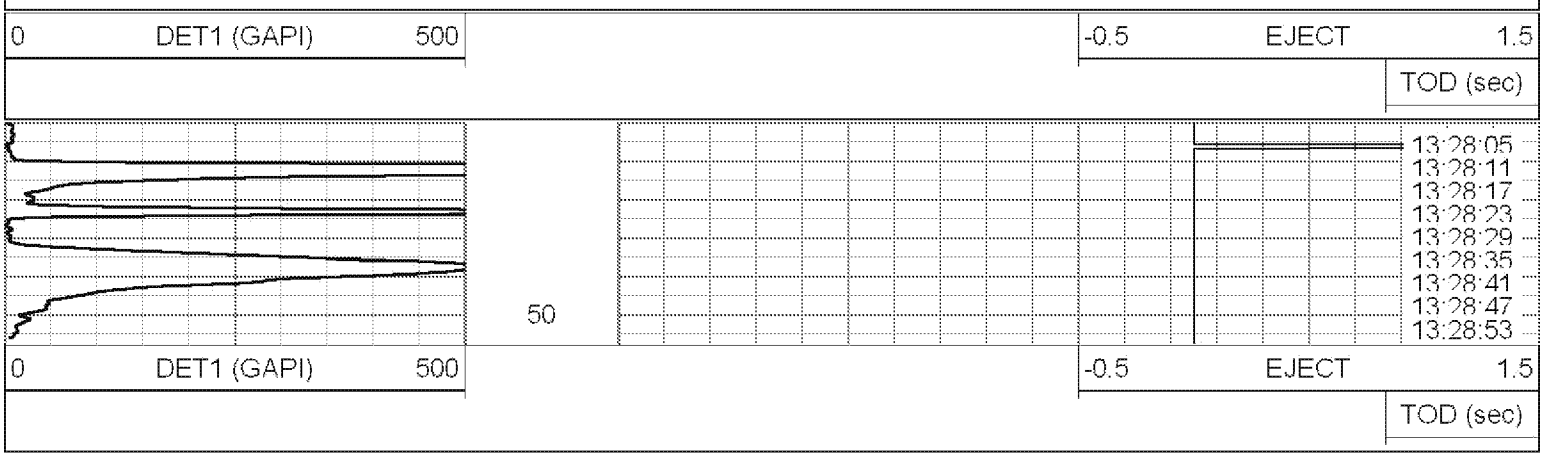
Database File c:\warrior\data\final tribal c-#13 6-29-2020.db
Dataset Pathname pass24
Presentation Format tracer
Dataset Creation Mon Jun 29 13:42:51 2020
Charted by Time scaled 72/hour

Exhibit D

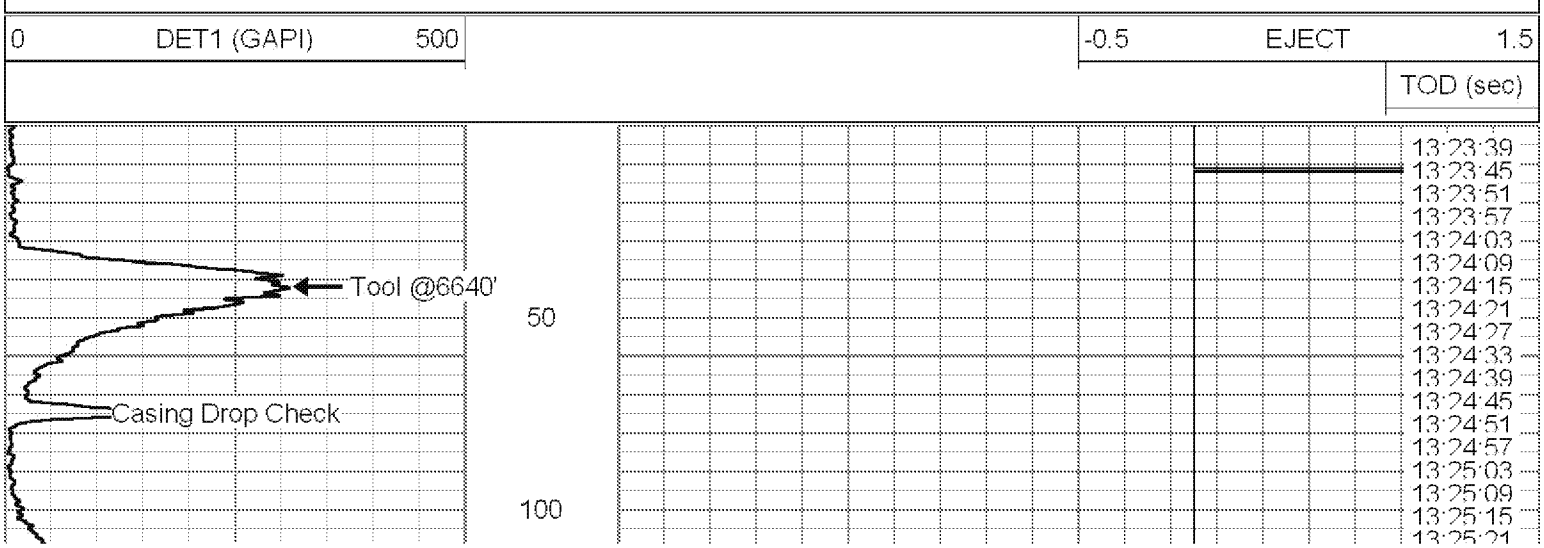


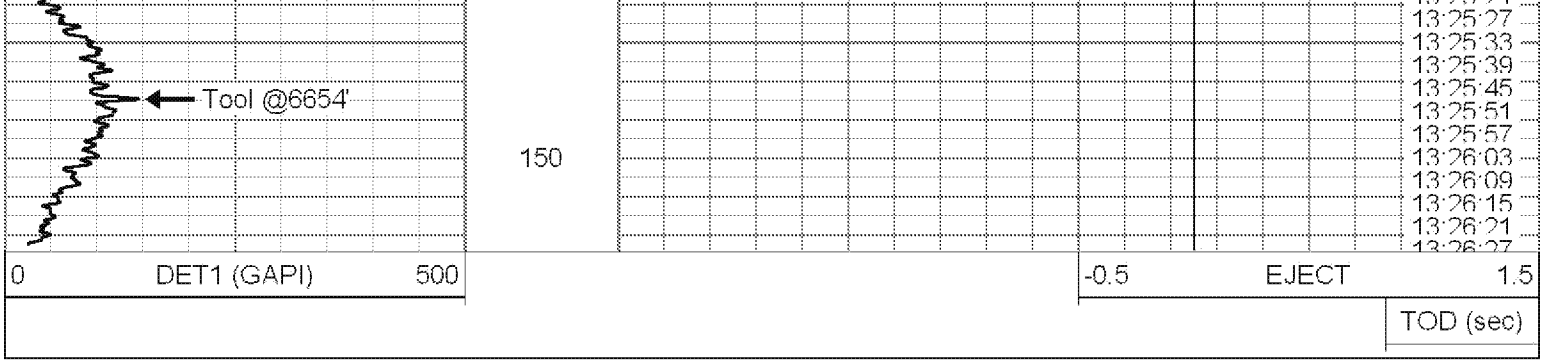


Database File	c:\warrior\data\final tribal c-#13 6-29-2020.db
Dataset Pathname	pass23
Presentation Format	tracer
Dataset Creation	Mon Jun 29 13:42:51 2020
Charted by	Time scaled 72/hour



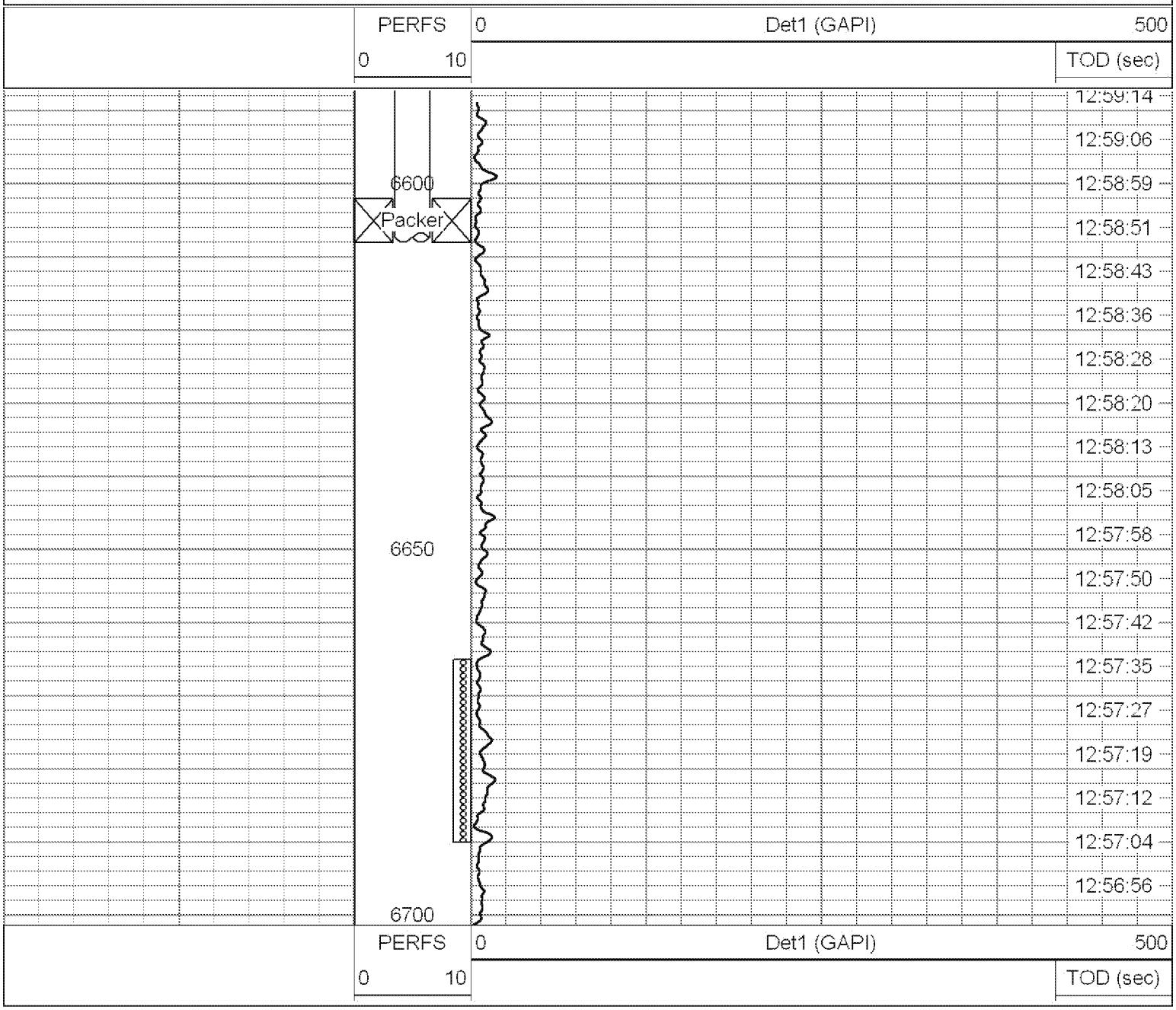
Database File	c:\warrior\data\final tribal c-#13 6-29-2020.db
Dataset Pathname	pass22
Presentation Format	tracer
Dataset Creation	Mon Jun 29 13:42:51 2020
Charted by	Time scaled 72/hour





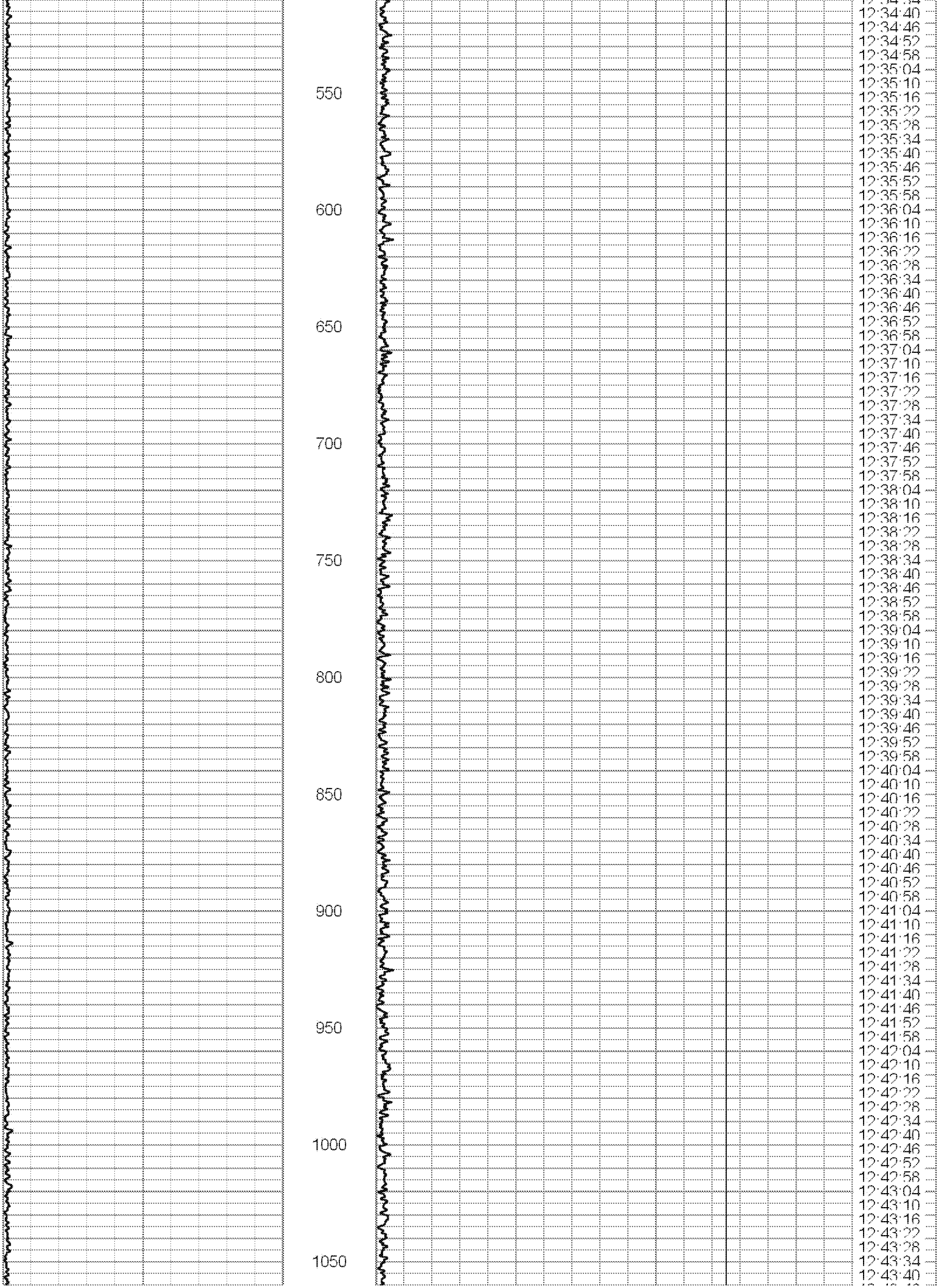
Database File c:\warrior\data\final tribal c-#13 6-29-2020.db
Dataset Pathname pass20
Presentation Format spldrag
Dataset Creation Mon Jun 29 13:05:50 2020
Charted by Depth in Feet scaled 1:240

Exhibit D



Database File c:\warrior\data\final tribal c-#13 6-29-2020.db
Dataset Pathname pass19
Presentation Format tracer
Dataset Creation Mon Jun 29 13:05:47 2020

Charted by Time scaled 72/hour


550
600
650
700
750
800
850
900
950
1000
1050
12:34:40
12:34:46
12:34:52
12:34:58
12:35:04
12:35:10
12:35:16
12:35:22
12:35:28
12:35:34
12:35:40
12:35:46
12:35:52
12:35:58
12:36:04
12:36:10
12:36:16
12:36:22
12:36:28
12:36:34
12:36:40
12:36:46
12:36:52
12:36:58
12:37:04
12:37:10
12:37:16
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12:37:58
12:38:04
12:38:10
12:38:16
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12:39:04
12:39:10
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12:39:46
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12:40:58
12:41:04
12:41:10
12:41:16
12:41:22
12:41:28
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12:41:58
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12:42:28
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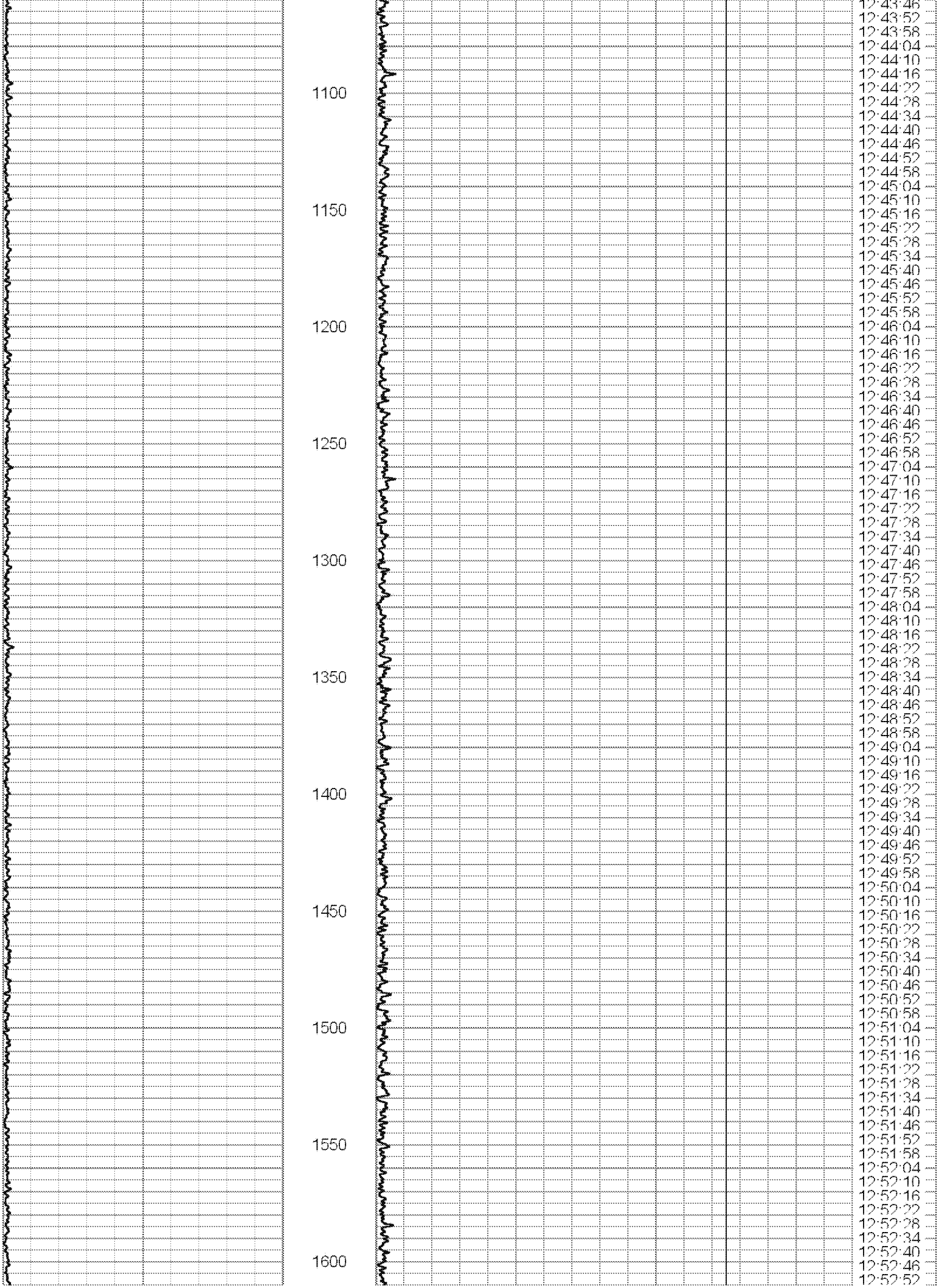
12:43:34
12:43:40


1100
1150
1200
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1300
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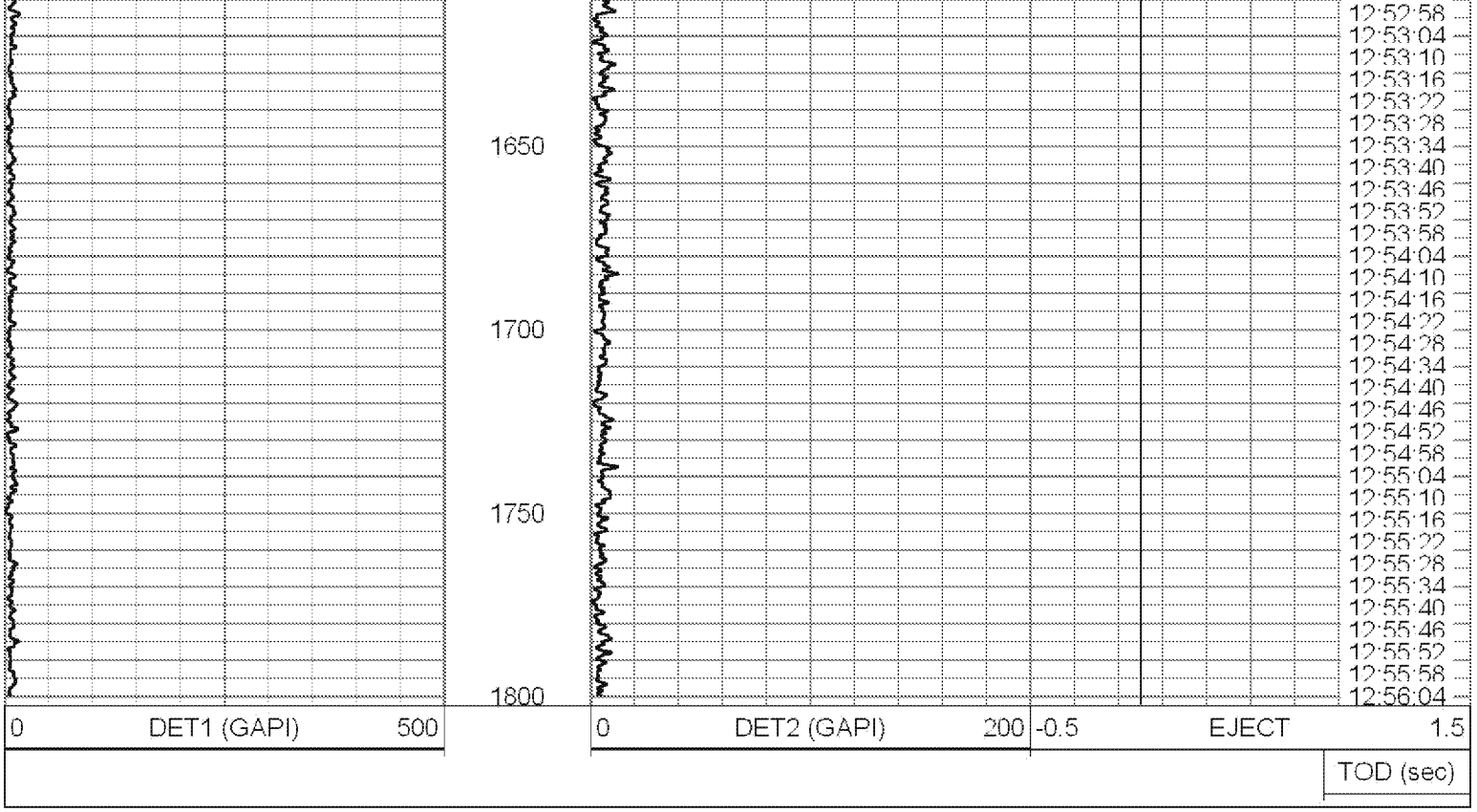
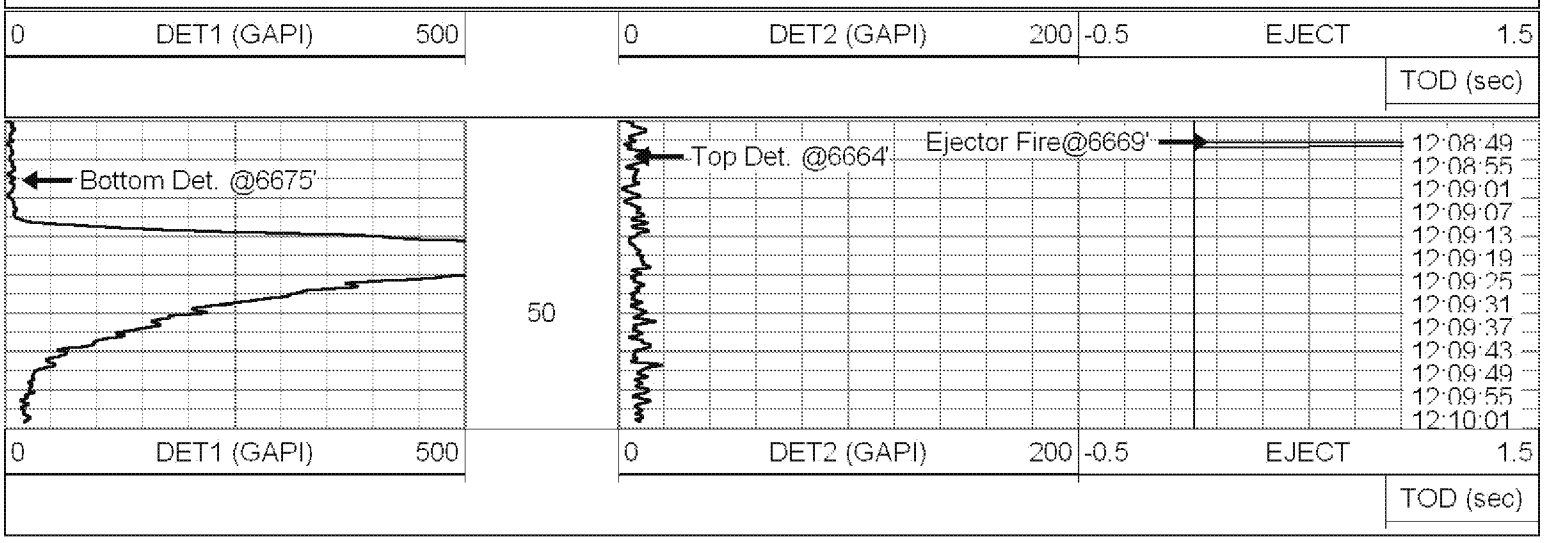
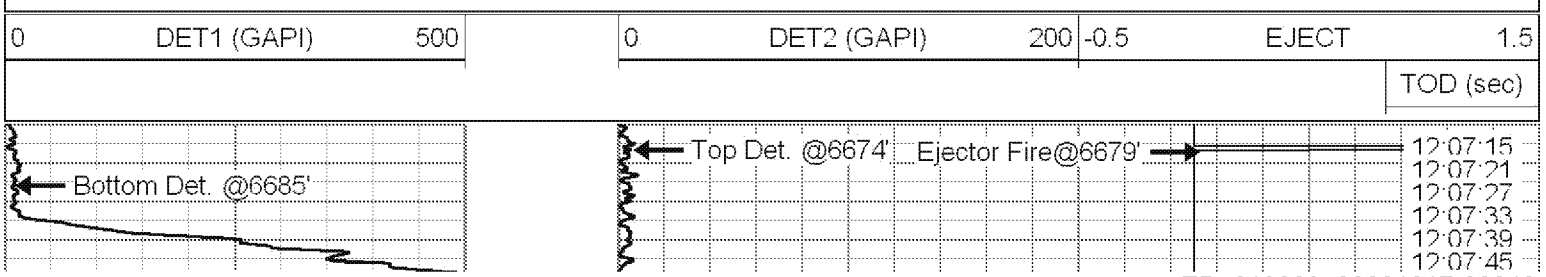
12:52:52

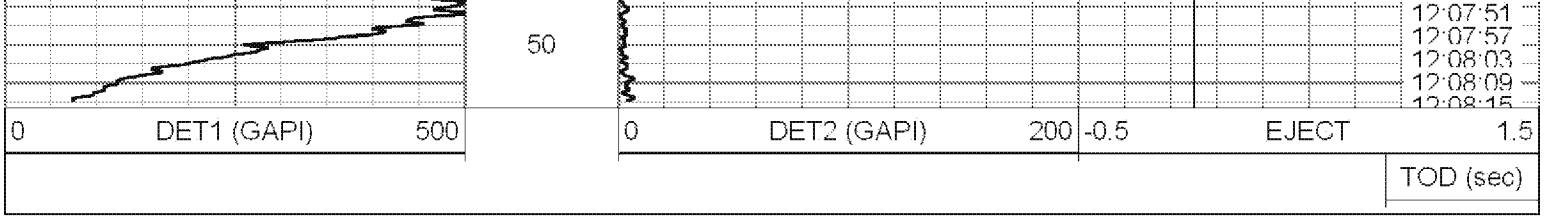


Database File	c:\warrior\data\final tribal c-#13 6-29-2020.db
Dataset Pathname	pass17
Presentation Format	tracer
Dataset Creation	Mon Jun 29 13:05:46 2020
Charted by	Time scaled 72/hour

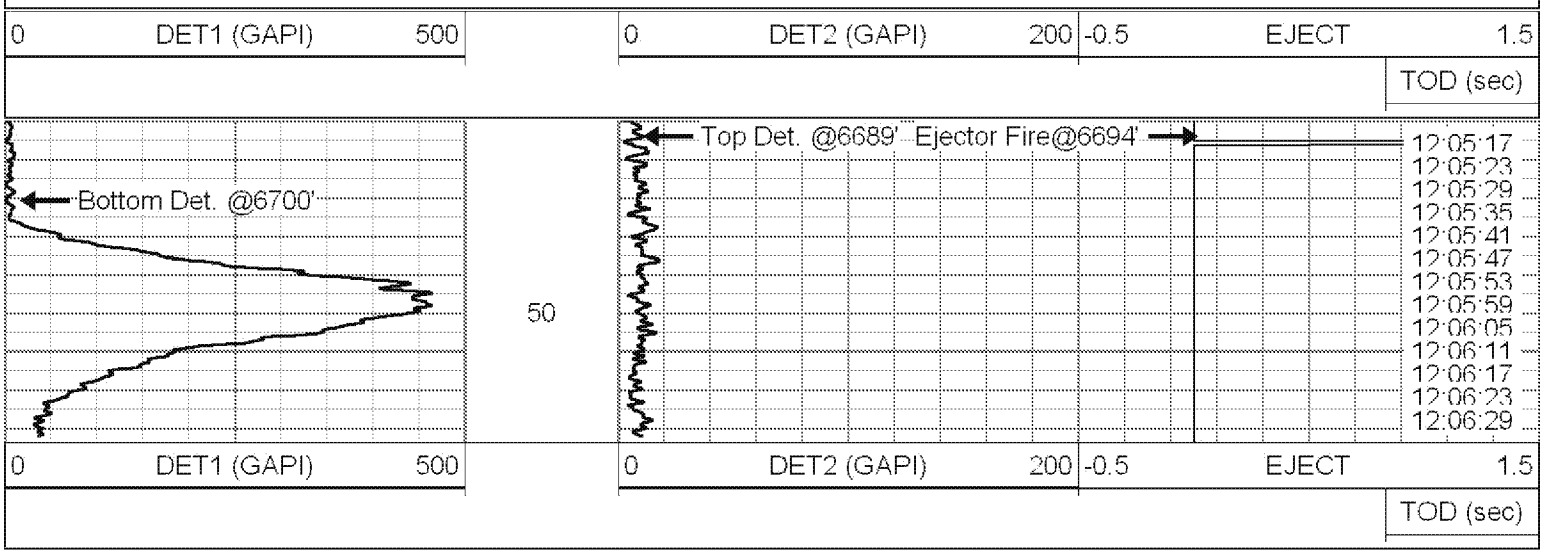


Database File	c:\warrior\data\final tribal c-#13 6-29-2020.db
Dataset Pathname	pass16
Presentation Format	tracer
Dataset Creation	Mon Jun 29 13:05:46 2020
Charted by	Time scaled 72/hour



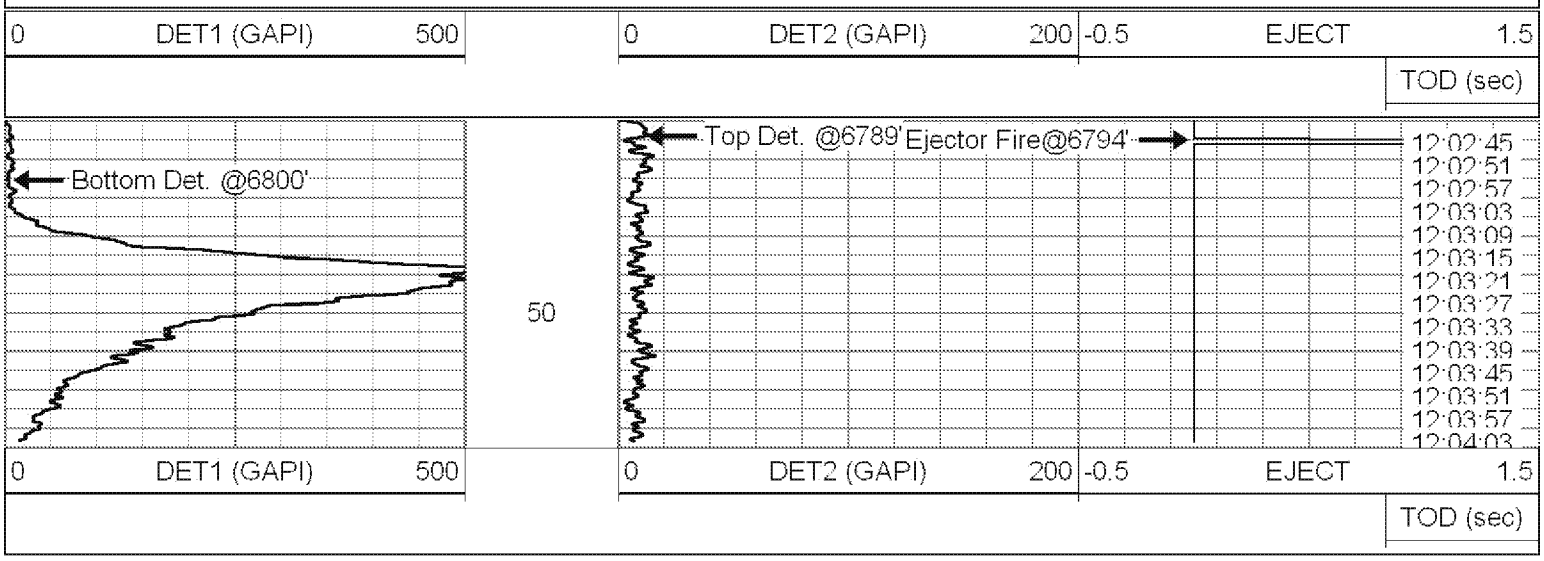


Database File c:\warrior\data\final tribal c-#13 6-29-2020.db
Dataset Pathname pass15
Presentation Format tracer
Dataset Creation Mon Jun 29 13:05:45 2020
Charted by Time scaled 72/hour

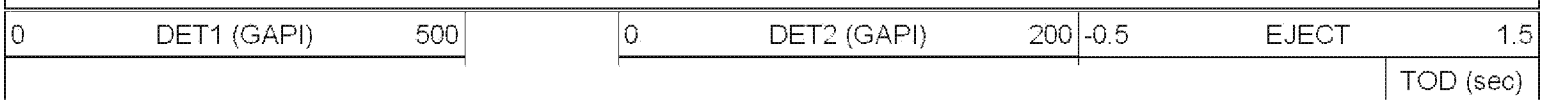


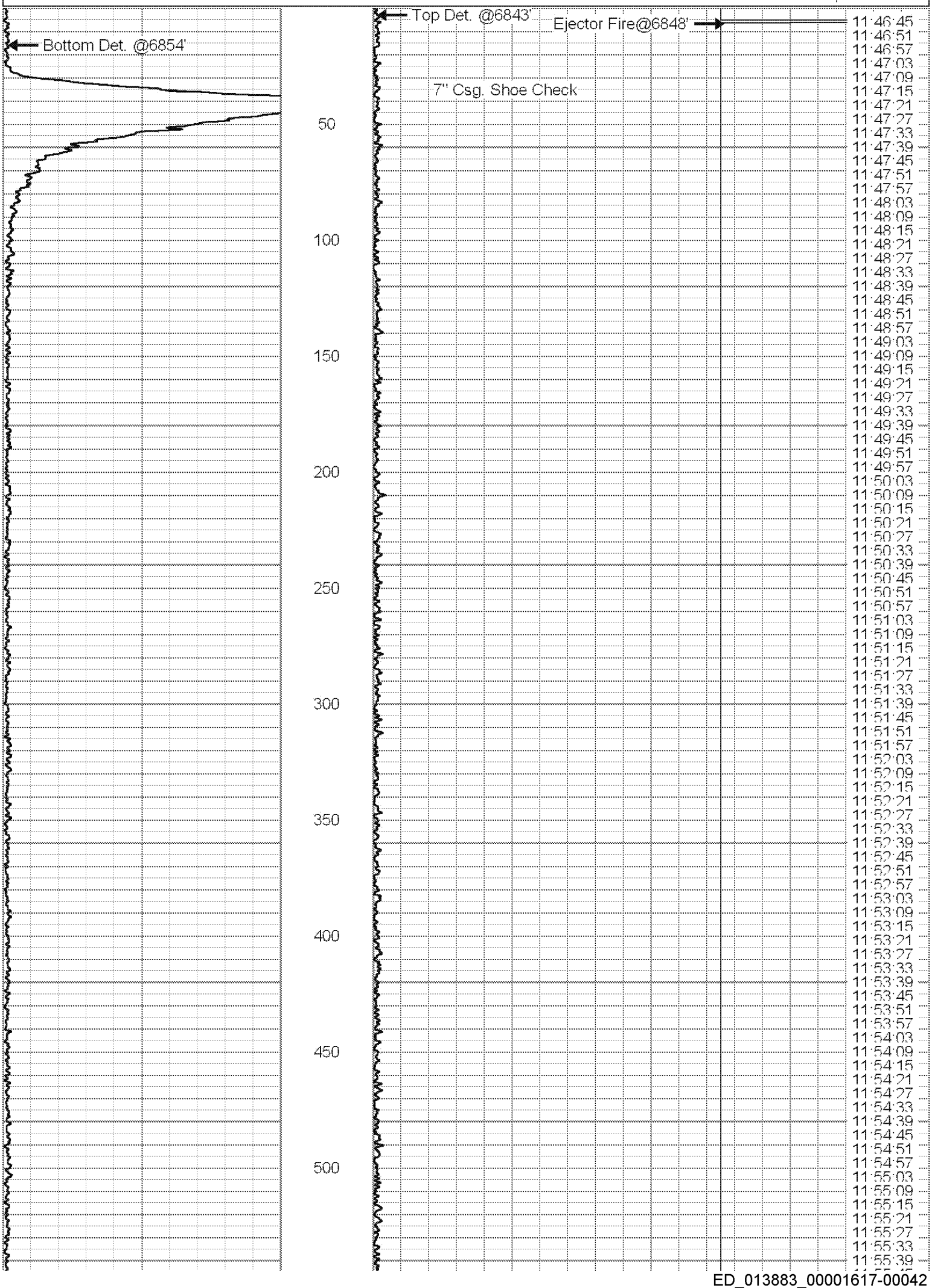
Database File c:\warrior\data\final tribal c-#13 6-29-2020.db
Dataset Pathname pass14
Presentation Format tracer
Dataset Creation Mon Jun 29 13:05:45 2020
Charted by Time scaled 72/hour

Exhibit D



Database File c:\warrior\data\final tribal c-#13 6-29-2020.db
Dataset Pathname pass13
Presentation Format tracer
Dataset Creation Mon Jun 29 13:05:44 2020
Charted by Time scaled 72/hour




Bottom Det. @6854'
Top Det. @6843'
Ejector Fire@6848'
7" Csg. Shoe Check
50
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200
250
300
350
400
450
500
11:46:45
11:46:51
11:46:57
11:47:03
11:47:09
11:47:15
11:47:21
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11:47:33
11:47:39
11:47:45
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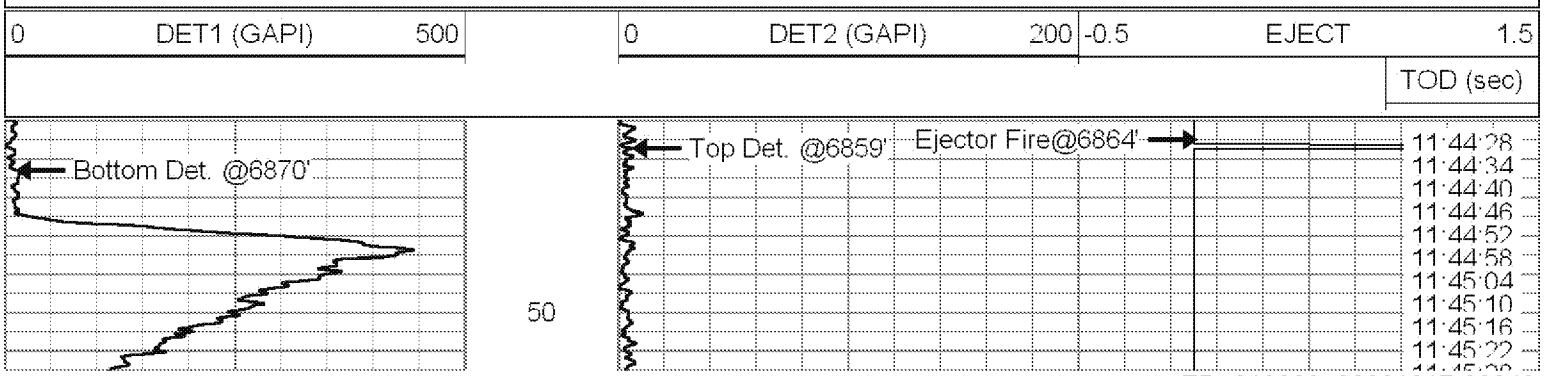
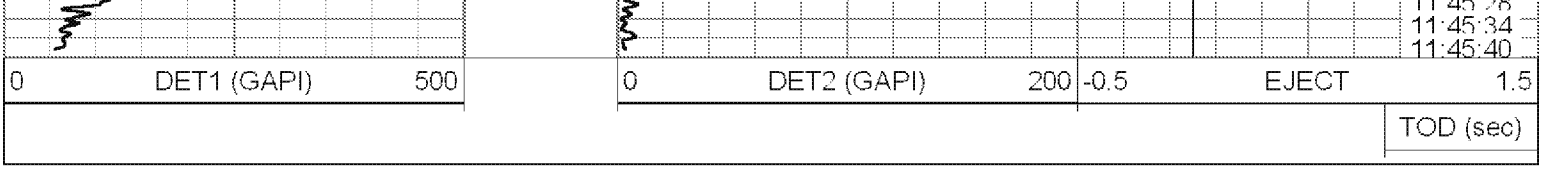
11:55:39

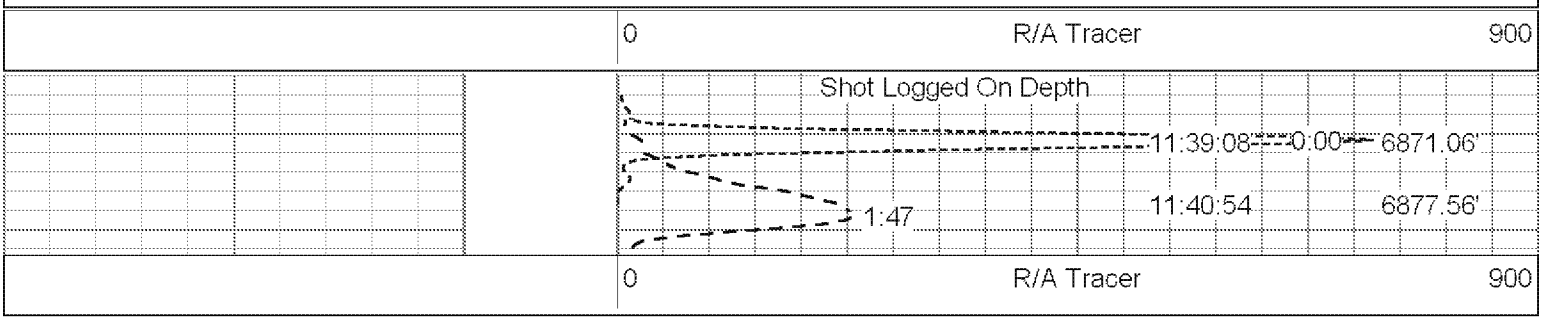
Database File c:\warrior\data\final tribal c-#13 6-29-2020.db
Dataset Pathname pass12
Presentation Format tracer
Dataset Creation Mon Jun 29 13:05:44 2020
Charted by Time scaled 72/hour

Exhibit D

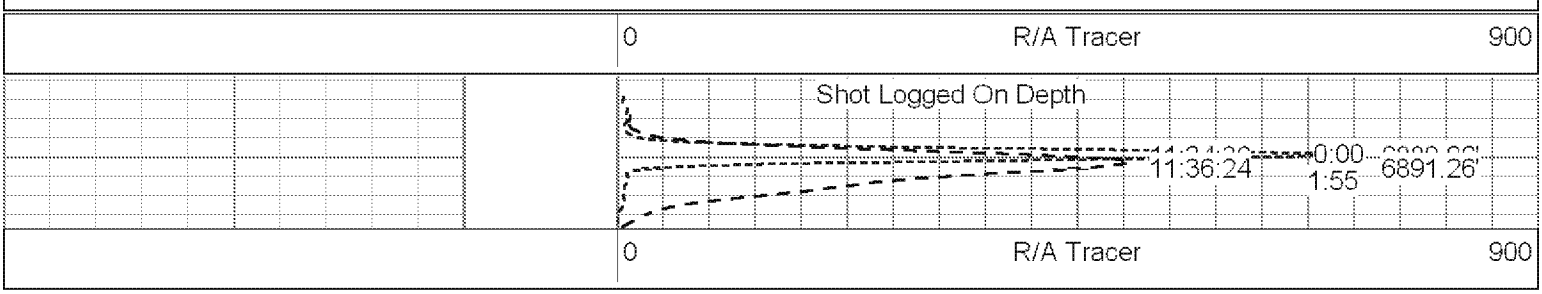




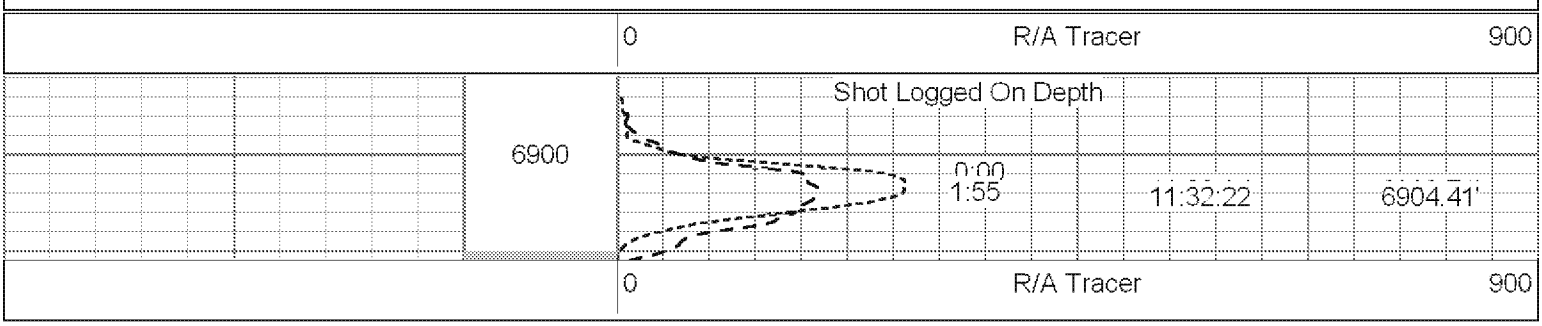
Database File	c:\warrior\data\final tribal c-#13 6-29-2020.db
Dataset Pathname	_profile3_
Presentation Format	spldrag
Dataset Creation	Mon Jun 29 13:05:44 2020
Charted by	Depth in Feet scaled 1:240



Database File	c:\warrior\data\final tribal c-#13 6-29-2020.db
Dataset Pathname	_profile2_
Presentation Format	spldrag
Dataset Creation	Mon Jun 29 13:05:43 2020
Charted by	Depth in Feet scaled 1:240



Database File	c:\warrior\data\final tribal c-#13 6-29-2020.db
Dataset Pathname	_profile1_
Presentation Format	spldrag
Dataset Creation	Mon Jun 29 13:05:43 2020
Charted by	Depth in Feet scaled 1:240



Marathon Oil Company

Water Analysis Report

Field : Steamboat Field	Sample Date : 9/8/2005
County : Fremont	Formation :
Location : Steamboat WIP	Rock Type :
Lab ID : B05090763-003	Depth :
Comments : INJECTION FLUID.	

CATIONS	mg/l	meq/l
Potassium	82.0	2.10
Sodium	1,540.0	66.99
Calcium	314.0	15.67
Magnesium	60.0	4.94
Iron	nd	nd
Barium	0.0	0.00
Strontium	9.0	0.21
SUM +	2,005.0	89.91

ANIONS	mg/l	meq/l
Sulfate	2,070.0	43.10
Chloride	1,140.0	32.16
Carbonate	0.0	0.00
Bicarbonate	738.1	12.10
Bromide	0.0	0.00
Organic Acids	0.0	0.00
Hydroxide	0.0	0.00
SUM -	3,948.1	87.36

Solids

Total Dissolved Solids @180°C	nd	
Total Solids, Calc less CO_2	5,510	mg/l
Total Solids, Calculated	5,584	mg/l
Total Solids, NaCl equivalents	4,199	mg/l
Chloride as NaCl	1,880	mg/l
NaCl% of Total Dissolved Solids		%
Accuracy	-1.75	Sigma

Sample Conditions

pH, s.u. (Field)	7.45	s.u.
Sample Pressure	14.70	psia
Mole% CO_2, Gas	3.42	%
pH, s.u. (from CO_2)	7.45	s.u.
Surface Temp	130	°F
Downhole Temp	0	°F
Ionic Strength	0.121	μ

Dissolved Gases

Bisulfide ion, HS^-	91.9	mg/l
Hydrogen Sulfide, H_2S	35.8	mg/l
Total Sulfide	127.7	mg/l
Dissolved O_2, aq	0.0	ppb
Measured CO_2, aq	34.0	mg/l
Calculated CO_2, aq	26.7	mg/l

Other Properties

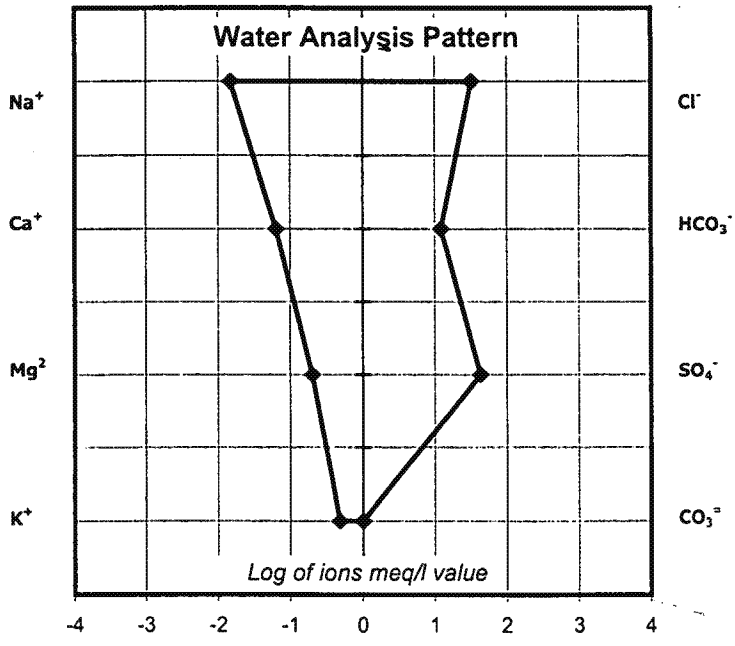
Calcium Hardness as $CaCO_3$	784.0	mg/l
Magnesium Hardness as $CaCO_3$	247.0	mg/l
Total Hardness as $CaCO_3$	1,031.0	mg/l
Hardness, grains	60.04	grains/gallon
Specific Gravity	1.006	measured
Specific Gravity	1.004	calculated
Resistivity, 68°F	1.277	ohm-cm
Conductivity 25°C	7,830	μmhos/cm

Microbiological

Sulfate Reducing	nd
Aerobic Bacteria	nd

Scaling Conditions

Calcium Carbonate	$CaCO_3$	+
Calcium Sulfate	$CaSO_4$	- - -
Barium Sulfate	$BaSO_4$	-
Strontium Sulfate	$SrSO_4$	-



Probable Mineral Residue, Dry

Calculation error = -2.9 %

COMPOUND	mg/l
Na2SO4	2,428.1
NaCl	1,879.3
Ca(HCO3)2	964.5
MgSO4	297.1
CaSO4	256.4
SrSO4	18.9

Radionuclides, Method E903.0

Radium 226	22.2	pCi/L
R226 precision (±)	1.6	pCi/L
Radium 228	10.0	pCi/L
R228 precision (±)	1.9	pCi/L

Exhibit E

Marathon Oil Company

Water Analysis Report

Field : Steamboat Field	Sample Date : 9/8/2005
County : Fremont	Formation :
Location : Steamboat WIP	Rock Type :
Lab ID : B05090763-003	Depth :
Comments : INJECTION FLUID.	

CATIONS	mg/l	meq/l
Potassium	82.0	2.10
Sodium	1,540.0	66.99
Calcium	314.0	15.67
Magnesium	60.0	4.94
Iron	nd	nd
Barium	0.0	0.00
Strontium	9.0	0.21
SUM +	2,005.0	89.91

ANIONS	mg/l	meq/l
Sulfate	2,070.0	43.10
Chloride	1,140.0	32.16
Carbonate	0.0	0.00
Bicarbonate	738.1	12.10
Bromide	0.0	0.00
Organic Acids	0.0	0.00
Hydroxide	0.0	0.00
SUM -	3,948.1	87.36

Solids

Total Dissolved Solids @180°C	nd	
Total Solids, Calc less CO_2	5,510	mg/l
Total Solids, Calculated	5,584	mg/l
Total Solids, NaCl equivalents	4,199	mg/l
Chloride as NaCl	1,880	mg/l
NaCl% of Total Dissolved Solids		%
Accuracy	-1.75	Sigma

Sample Conditions

pH, s.u. (Field)	7.45	s.u.
Sample Pressure	14.70	psia
Mole% CO_2, Gas	3.42	%
pH, s.u. (from CO_2)	7.45	s.u.
Surface Temp	130	°F
Downhole Temp	0	°F
Ionic Strength	0.121	μ

Dissolved Gases

Bisulfide ion, HS^-	91.9	mg/l
Hydrogen Sulfide, H_2S	35.8	mg/l
Total Sulfide	127.7	mg/l
Dissolved O_2, aq	0.0	ppb
Measured CO_2, aq	34.0	mg/l
Calculated CO_2, aq	26.7	mg/l

Other Properties

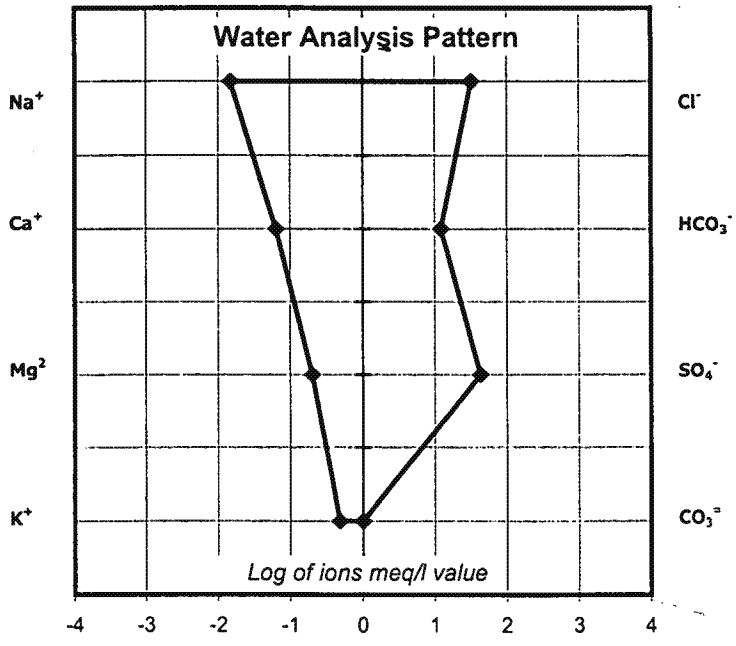
Calcium Hardness as $CaCO_3$	784.0	mg/l
Magnesium Hardness as $CaCO_3$	247.0	mg/l
Total Hardness as $CaCO_3$	1,031.0	mg/l
Hardness, grains	60.04	grains/gallon
Specific Gravity	1.006	measured
Specific Gravity	1.004	calculated
Resistivity, 68°F	1.277	ohm-cm
Conductivity 25°C	7,830	μmhos/cm

Microbiological

Sulfate Reducing	nd
Aerobic Bacteria	nd

Scaling Conditions

Calcium Carbonate	$CaCO_3$	+
Calcium Sulfate	$CaSO_4$	- - -
Barium Sulfate	$BaSO_4$	-
Strontium Sulfate	$SrSO_4$	-



Probable Mineral Residue, Dry

Calculation error = -2.9 %

COMPOUND	mg/l
Na2SO4	2,428.1
NaCl	1,879.3
Ca(HCO3)2	964.5
MgSO4	297.1
CaSO4	256.4
SrSO4	18.9

Radionuclides, Method E903.0

Radium 226	22.2	pCi/L
R226 precision (±)	1.6	pCi/L
Radium 228	10.0	pCi/L
R228 precision (±)	1.9	pCi/L

Exhibit E

ENERGY LABORATORIES, INC.
P.O. BOX 30916 • 1120 SOUTH 27TH STREET • BILLINGS, MT 59107-0916 • PHONE (406) 252-6325
FAX (406) 252-6069 • 1-800-735-4489 • E-MAIL eli@energylab.com

Company : Marathon Oil Company	Date : 06/18/99
Field :	Location :
County :	Formation : Phosphoria
Lab ID : 99-53022	
Comment : Cloudy, orange sample; clear, colorless filtrate.	
Description : Steamboat Butte, Tribal E-31 Phosphoria	

Energy Laboratories, Inc. Water Analysis Report

CATIONS	mg/l	meq/l	ANIONS	mg/l	meq/l
Potassium	82.0	2.10	Sulfate	3,060.0	63.72
Sodium	1,960.0	85.26	Chloride	1,590.0	44.85
Calcium	281.0	14.02	Carbonate	0.0	0.00
Magnesium	59.0	4.85	Bicarbonate	237.0	3.89
Iron	22.3	0.80	Hydroxide	0.0	0.00
Barium	<0.1	0.00	–	–	–
Strontium	7.6	0.17	–	–	–
SUM +	2,411.9	107.20	SUM –	4,887.0	112.46

Solids

Total Dissolved Solids	7,150 mg/l
Total Solids, NaCl equivalents	5,381 mg/l
Chloride as NaCl	2,621 mg/l

Sample Conditions

pH, s.u.	6.80 s.u.
Ionic Strength	0.15 μ
Accuracy	2.84 Sigma

Other Properties

Calcium Hardness as $CaCO_3$	701.6 mg/l
Magnesium Hardness as $CaCO_3$	242.4 mg/l
Total Hardness as $CaCO_3$	944.0 mg/l

Specific Gravity	N/A measured
Specific Gravity	1.004 calculated
Resistivity, 68 F	1.089 ohm meter

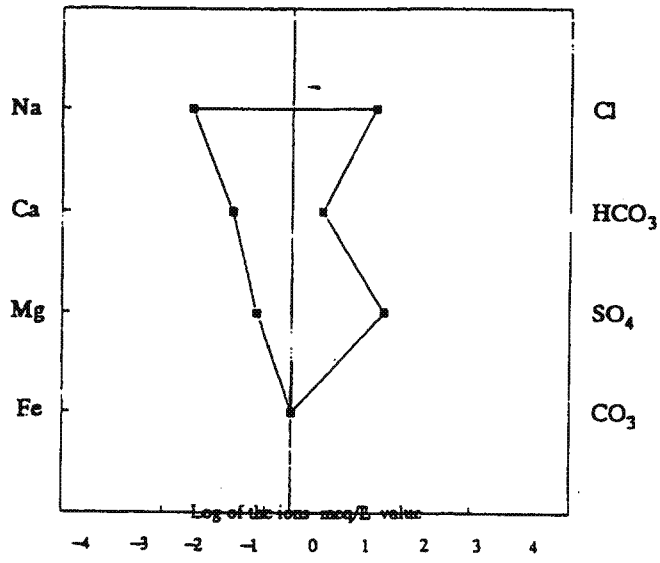
Microbiological

Sulfate Reducing Bacteria nd

Scaling Conditions

$CaCO_3$: + $CaSO_4$: –
$BaSO_4$: – $SrSO_4$: +

Water Analysis Pattern



Probable Mineral Residue, Dry

Calculation error –1 %

Compound	mg/l
Na_2SO_4	4,006
NaCl	2,145
$CaSO_4$	690
$Ca(HCO_3)_2$	315
$MgSO_4$	292
KCl	156
$SrSO_4$	16

06/18/99

NOTE: nd indicates not determined

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Exhibit F

Marathon Oil Company

Water Analysis Report

Field : Steamboat Field	Sample Date : 9/8/2005
County : Fremont	Formation : Tensleep
Location : Tribal C-39-T	Rock Type :
Lab ID : B05090763-004	Depth :
Comments :	

CATIONS	mg/l	meq/l
Potassium	101.0	2.58
Sodium	432.0	18.79
Calcium	348.0	17.37
Magnesium	72.0	5.92
Iron	nd	nd
Barium	0.0	0.00
Strontium	9.0	0.21
SUM +	962.0	44.87

ANIONS	mg/l	meq/l
Sulfate	1,300.0	27.07
Chloride	268.0	7.56
Carbonate	0.0	0.00
Bicarbonate	475.8	7.80
Bromide	0.0	0.00
Organic Acids	0.0	0.00
Hydroxide	0.0	0.00
SUM -	2,043.8	42.43

Solids

Total Dissolved Solids @180°C	nd	
Total Solids, Calc less CO_2	2,720	mg/l
Total Solids, Calculated	2,768	mg/l
Total Solids, NaCl equivalents	1,760	mg/l
Chloride as NaCl	442	mg/l
NaCl% of Total Dissolved Solids	16.24	%
Accuracy	-3.19	Sigma

Sample Conditions

pH, s.u. (Field)	6.92	s.u.
Sample Pressure	14.70	psia
Mole% CO_2, Gas	10.46	%
pH, s.u. (from CO_2)	6.92	s.u.
Surface Temp	156	°F
Downhole Temp	0	°F
Ionic Strength	0.069	μ

Dissolved Gases

Bisulfide ion, HS^-	42.6	mg/l
Hydrogen Sulfide, H_2S	56.2	mg/l
Total Sulfide	98.8	mg/l

Dissolved O_2, aq	0.0	ppb
Measured CO_2, aq	94.0	mg/l
Calculated CO_2, aq	67.1	mg/l

Other Properties

Calcium Hardness as $CaCO_3$	868.9	mg/l
Magnesium Hardness as $CaCO_3$	296.1	mg/l
Total Hardness as $CaCO_3$	1,165.0	mg/l
Hardness, grains	67.84	grains/gallon

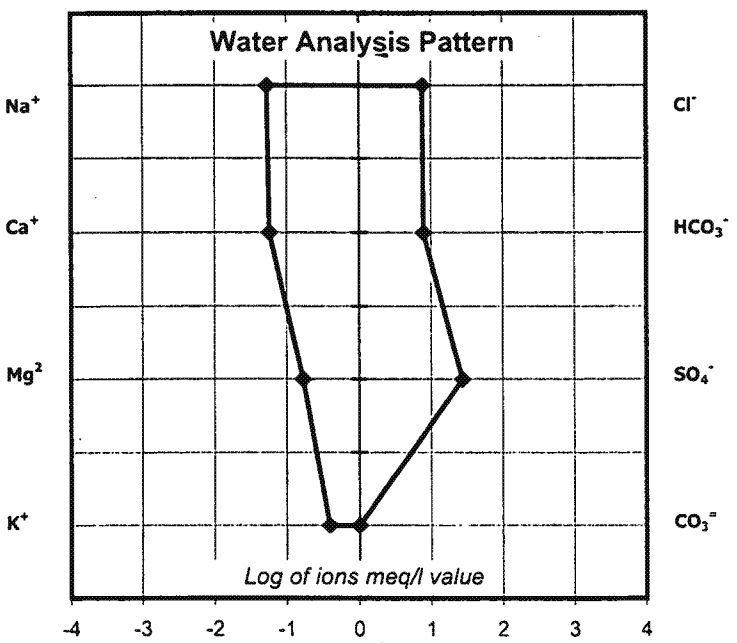
Specific Gravity	1.004	measured
Specific Gravity	1.002	calculated
Resistivity, 68°F	2.660	ohm-cm
Conductivity 25°C	3,760	μmhos/cm

Microbiological

Sulfate Reducing	nd
Aerobic Bacteria	nd

Scaling Conditions

Calcium Carbonate	$CaCO_3$	+
Calcium Sulfate	$CaSO_4$	- - -
Barium Sulfate	$BaSO_4$	-
Strontium Sulfate	$SrSO_4$	-



Probable Mineral Residue, Dry

Calculation error = -5.8 %

COMPOUND	mg/l
Na2SO4	798.5
CaSO4	659.8
Ca(HCO3)2	621.8
NaCl	441.1
MgSO4	356.6
SrSO4	18.9
KCl	0.9

Radionuclides, Method E903.0

Radium 226	19.2	pCi/L
R226 precision (±)	1.4	pCi/L
Radium 228	18.0	pCi/L
R228 precision (±)	2.1	pCi/L

Exhibit F

Marathon Oil Company

Rocky Mountain Oil Operations
United States Production Operations

1501 Stampede Avenue
Cody, WY 82414
Telephone: (307) 587-4961

June 16, 2009

Via Certified Mail – Return Receipt Requested

Ms. Linda Bowling
U. S. Environmental Protection Agency – Region VIII
1595 Wynkoop Street
Denver, CO 80202-1129

RE: Well: Tribal C13
EPA UIC Permit WY21098-07393
Steamboat Butte Field
Fremont County, WY
Submission of Follow-Up Logging & Testing Requirements

Dear Ms. Bowling:

On May 19, 2009, Marathon Oil Company substantially completed the equipment, logging, and testing requirements set forth in the final permit for the subject well. Specifically, the following work has been completed:

1. Obtained reservoir pore pressures at (-)1155 ft subsea elevation as follows:
   Phosphoria + Tensleep Commingled = 743 psig
   Tensleep Only = 759 psig

2. Ran a casing scraper and cement bond log (CBL) for the 7.0" OD casing (enclosed for your review).

3. Performed a step-rate test into the Phosphoria and Tensleep reservoirs. The data indicated the Phosphoria and Tensleep was extremely fractured. Based on the data collected, it does not appear that fracture pressure was reached at a maximum equivalent daily injection rate of 28,080 bbls per day. Step rate test data and plots are enclosed for your review.

4. Installed: a) injection line to well, b) 3.5" OD internally-coated tubing and nickel-coated packer within 100 ft of top Phosphoria perforation, c) injection wellhead and valves, and d) meter, choke, pressure & sampling points according to permit requirements.

5. Pumped inhibited packer fluid down the casing ("backside").

6. Ran UIC mechanical integrity test on May 19, 2009. Test was witnessed by several Eastern Shoshone tribal representatives along with Marathon and contractor personnel. Test chart is enclosed for your review.

Exhibit G

Also enclosed is EPA Well Rework Record Form 7520-12.

The above work should complete the permit requirements to equip the subject well for water injection. Authorization to inject is now requested. Should you care to discuss or need anything further, please contact the undersigned at the above address or phone (307-527-2133).

MARATHON OIL COMPANY

R.P. Meabon
Regulatory Coordinator
Rocky Mountain Operations

Exhibit G

Form Approved. OMB No 2000-0042. Approval expires 9-30-86

EPA

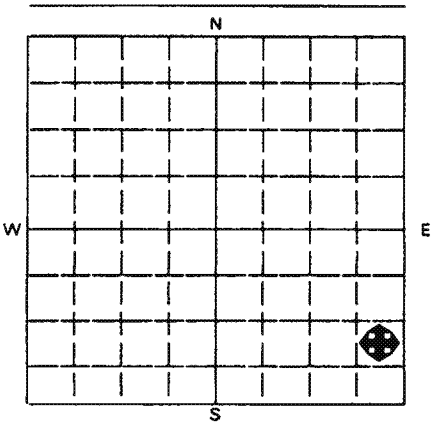
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

WELL REWORK RECORD

Exhibit G

NAME AND ADDRESS OF PERMITTEE	NAME AND ADDRESS OF CONTRACTOR
Marathon Oil Company 1501 Stampede Avenue Cody, Wyoming 82414	R & S Well Service 818 S 7 Thermopolis, Wyoming 82443

LOCATE WELL AND OUTLINE UNIT ON SECTION PLAT — 640 ACRES



STATE	COUNTY	PERMIT NUMBER
WY	Fremont	WY21095-07393

SURFACE LOCATION DESCRIPTION

SE ¼ OF SE ¼ OF SECTION 30 TOWNSHIP 4N RANGE 1W

LOCATE WELL IN TWO DIRECTIONS FROM NEAREST LINES OF QUARTER SECTION AND DRILLING UNIT

Surface Location 940 ft. from (N/S) S Line of quarter section

and 320 ft. from (E/W) E Line of quarter section

WELL ACTIVITY	Total Depth Before Rework	TYPE OF PERMIT
☐ Brine Disposal	7051 ft	☒ Individual
☒ Enhanced Recovery	Total Depth After Rework: 7051 ft	☐ Area
☐ Hydrocarbon Storage		Number of Wells
Lease Name: TRIBAL 'C'	Date Rework Commenced: Mar 12, 2009	Well Number: # 13
	Date Rework Completed: Apr 8, 2009	

WELL CASING RECORD -- BEFORE REWORK

Casing Size	Casing Depth	Cement Sacks	Cement Type	Perforations From	Perforations To	Acid or Fracture Treatment Record
10.0" OD	711 ft	430	Class G			
7.0" OD	6862 ft	1200	Class G	Phosphoria -- 6665' - 6690'		Feb 2000: Phos Acid Frac (3100 gals 28% HCl)
				Tensleep Openhole 6862 - 7051'		May 1979: Tensleep Acid Job (1500 gals 15% HCl) Feb 2000: Tensleep Sand Frac (23,424# 20-40 Sand)

WELL CASING RECORD -- AFTER REWORK *(Indicate Additions and Changes Only)*

Casing Size	Casing Depth	Cement Sacks	Cement Type	Perforations From	Perforations To	Acid or Fracture Treatment Record
10.0" OD	711 ft	430	Class G			
7.0" OD	6862 ft	1200	Class G	Phosphoria -- 6665' - 6690'		1000 gals 28% HCl acid
				Tensleep Openhole 6862 - 7051'		No Tensleep Openhole Treatments Performed
7.0" OD	1370 - 1400 ft	270	Class G	Cement Sqz'd Csg Leak		

DESCRIBE REWORK OPERATIONS IN DETAIL
USE ADDITIONAL SHEETS IF NECESSARY

Removed pumping equipment. Ran bit and casing scraper. Ran cement bond log. Ran retrievable bridge plug with pressure gauge and packer to isolate Phosphoria perforations from 6665 - 6690'. Acidized Phosphoria perforations with 1000 gals 15% HCl acid. Cement squeezed casing leak from 1370-1400 ft. Ran Phosphoria-Tensleep step-rate injectivity test.Ran internally coated 3.5" OD tubing and nickel coated packer. Pumped inhibited packer fluid down casing and set packer at 6613 ft. Ran official UIC test on May 19, 2009.

WIRE LINE LOGS, LIST EACH TYPE

Log Types	Logged Intervals
Mar 18, 2009 5.5" CBL	4000 - 6580 ft

CERTIFICATION

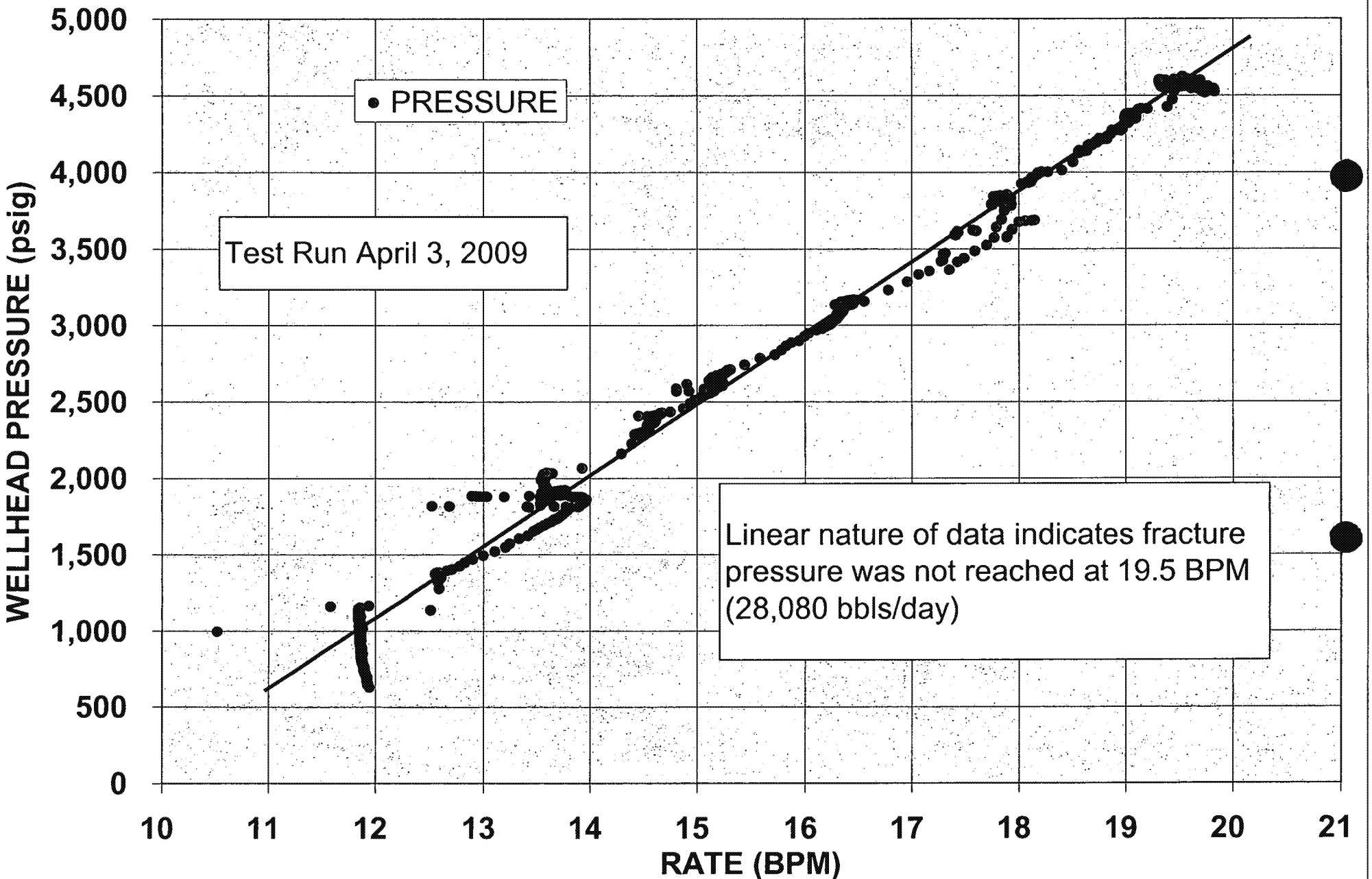
I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32)

NAME AND OFFICIAL TITLE *(Please type or print)*	SIGNATURE	DATE SIGNED
R.P. Meabon Regulatory Coordinator	RP Meabon	June 16, 2009

EPA Form 7520-12 (2-84)

Exhibit G

MARATHON OIL COMPANY
STEAMBOAT BUTTE FIELD
TRIBAL C13 PHOSPHORIA & TENSLEEP COMMINGLED STEP RATE TEST



MARATHON OIL CO

TRIBAL C13 STEP-RATE TEST

Exhibit G

Treating Pressure (psi)	Injection Rate (bpm)	Treating Pressure (psi)	Injection Rate (bpm)	Treating Pressure (psi)	Injection Rate (bpm)	Treating Pressure (psi)	Injection Rate (bpm)	Treating Pressure (psi)	Injection Rate (bpm)
-32	6.0	-37	6.0	-31	6.1	-25	6.1	-20	6.1
-32	6.0	-37	6.0	-31	6.1	-25	6.1	-20	6.1
-32	6.0	-37	6.0	-31	6.1	-25	6.1	-20	6.1
-33	6.0	-37	6.0	-31	6.1	-25	6.1	-20	6.1
-33	6.0	-37	6.0	-31	6.1	-25	6.1	-20	6.1
-34	6.0	-37	6.0	-31	6.1	-25	6.1	-20	6.1
-34	6.0	-37	6.0	-31	6.1	-25	6.1	-20	6.1
-35	6.0	-37	6.1	-31	6.1	-25	6.1	-20	6.1
-35	6.0	-37	6.0	-31	6.1	-25	6.1	-20	6.1
-35	6.0	-37	6.0	-31	6.1	-25	6.1	-20	6.1
-36	6.0	-37	6.1	-31	6.1	-25	6.1	-20	6.1
-36	6.0	-37	6.1	-31	6.1	-25	6.1	-20	6.1
-36	6.0	-37	6.0	-31	6.1	-25	6.1	-20	6.1
-36	6.0	-37	6.0	-31	6.1	-25	6.1	-20	6.1
-36	6.0	-37	6.1	-31	6.1	-24	6.1	-20	6.1
-36	6.0	-37	6.0	-30	6.1	-24	6.1	-20	6.1
-36	6.0	-37	6.0	-30	6.1	-24	6.1	-20	6.1
-36	6.0	-36	6.1	-30	6.1	-24	6.1	-20	6.1
-36	6.0	-36	6.0	-30	6.1	-24	6.1	-20	6.1
-36	6.0	-36	6.0	-30	6.1	-24	6.1	-19	6.1
-36	6.0	-36	6.1	-30	6.1	-24	6.1	-19	6.1
-36	6.0	-36	6.1	-30	6.1	-24	6.1	-19	6.1
-36	6.0	-36	6.0	-30	6.1	-24	6.1	-19	6.1
-36	6.0	-36	6.0	-30	6.1	-24	6.1	-19	6.1
-36	6.0	-36	6.1	-30	6.1	-24	6.1	-19	6.1
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-37	6.0	-35	6.1	-28	6.1	-23	6.1	-19	6.1
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-37	6.0	-34	6.1	-27	6.1	-22	6.1	-18	6.1
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-37	6.0	-34	6.1	-27	6.1	-22	6.1	-18	6.1
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-37	6.1	-33	6.1	-26	6.1	-21	6.1	-18	6.1
-37	6.0	-32	6.1	-26	6.1	-21	6.1	-18	6.1
-37	6.1	-32	6.1	-26	6.1	-21	6.1	-18	6.1
-37	6.0	-32	6.1	-26	6.1	-21	6.1	-18	6.1
-37	6.0	-32	6.1	-26	6.1	-21	6.1	-18	6.1
-37	6.0	-32	6.1	-26	6.1	-21	6.1	-18	6.1
-37	6.0	-32	6.1	-26	6.1	-21	6.1	-18	6.1
-37	6.0	-32	6.1	-26	6.1	-21	6.1	-17	6.1
-37	6.1	-32	6.1	-26	6.1	-21	6.1	-17	6.1
-37	6.0	-32	6.1	-26	6.1	-21	6.1	-17	6.1
-37	6.0	-32	6.1	-25	6.1	-21	6.1	-17	6.1
-37	6.1	-32	6.1	-25	6.1	-21	6.1	-17	6.1
-37	6.1	-32	6.1	-25	6.1	-21	6.1	-17	6.1
-37	6.1	-32	6.1	-25	6.1	-21	6.1	-17	6.1
-37	6.1	-32	6.1	-25	6.1	-21	6.1	-17	6.1
-37	6.0	-32	6.1	-25	6.1	-21	6.1	-17	6.1
-37	6.1	-31	6.1	-25	6.1	-20	6.1	-17	6.1
-37	6.0	-31	6.1	-25	6.1	-20	6.1	-17	6.1

Exhibit G

Treating Pressure (psi)	Injection Rate (bpm)	Treating Pressure (psi)	Injection Rate (bpm)	Treating Pressure (psi)	Injection Rate (bpm)	Treating Pressure (psi)	Injection Rate (bpm)	Treating Pressure (psi)	Injection Rate (bpm)
-17	6.1	856	11.9	1022	11.9	1111	11.9	1674	13.5
-17	6.1	856	11.9	1025	11.9	1112	11.8	1689	13.6
-17	6.1	862	11.9	1022	11.9	1117	11.8	1701	13.6
-17	6.1	867	11.9	1024	11.9	1115	11.9	1713	13.6
-17	6.1	865	11.9	1029	11.9	1113	11.8	1725	13.7
-17	6.1	868	11.9	1027	11.9	1120	11.8	1729	13.7
-17	6.1	875	11.9	1026	11.9	1119	11.9	1736	13.7
-17	6.1	875	11.9	1031	11.8	1116	11.9	1748	13.7
-17	6.1	876	11.9	1033	11.9	1120	11.8	1759	13.7
-17	6.1	881	11.9	1031	11.9	1124	11.9	1763	13.7
-17	6.1	885	11.9	1033	11.9	1120	11.8	1769	13.8
-17	6.1	883	11.9	1038	11.9	1121	11.8	1774	13.8
-17	6.1	887	11.9	1035	11.9	1126	11.8	1780	13.8
-17	6.1	893	11.9	1034	11.9	1125	11.8	1786	13.8
-17	6.1	892	11.9	1041	11.9	1123	11.8	1789	13.8
-17	6.1	893	11.9	1041	11.9	1128	11.8	1794	13.8
-17	6.1	901	11.9	1038	11.9	1130	11.8	1800	13.8
-17	6.1	901	11.9	1043	11.9	1126	11.9	1803	13.8
-17	6.1	900	11.9	1046	11.9	1126	11.9	1805	13.8
-17	6.1	905	11.9	1043	11.9	1128	11.9	1808	13.9
-17	6.1	909	11.9	1044	11.9	1133	11.8	1813	13.9
-17	6.1	907	11.9	1049	11.9	1130	11.9	1821	13.9
-17	6.1	909	11.9	1048	11.9	1129	11.9	1827	13.9
-17	6.1	916	11.9	1046	11.9	1134	11.9	1836	13.9
-17	6.1	915	11.9	1051	11.9	1134	11.9	1844	13.9
-17	6.1	916	11.9	1053	11.9	1131	11.9	1846	14.0
-17	6.1	921	11.9	1050	11.9	1135	11.8	1852	14.0
-17	6.1	924	11.9	1053	11.9	1138	11.9	1858	14.0
-17	6.1	921	11.9	1058	11.9	1135	11.8	1860	14.0
-17	6.1	925	11.9	1055	11.9	1136	11.8	1865	14.0
-17	6.1	930	11.9	1056	11.9	1141	11.8	1869	13.9
-17	6.1	928	11.9	1061	11.9	1139	11.9	1870	13.9
-17	6.1	929	11.9	1061	11.9	1137	11.9	1874	13.9
-17	6.1	935	11.9	1059	11.9	1142	11.9	1877	13.9
-17	6.1	936	11.9	1062	11.9	1144	11.9	1876	13.9
-17	6.1	935	11.9	1066	11.9	1140	11.8	1876	13.9
-17	6.1	939	11.9	1063	11.9	1142	11.9	1878	13.9
-17	6.1	944	11.9	1065	11.9	1146	11.8	1877	13.9
-17	6.1	941	11.9	1070	11.9	1143	11.9	1875	13.9
-17	6.1	942	11.9	1068	11.8	1143	11.9	1877	13.9
-17	6.1	950	11.9	1067	11.9	1148	11.8	1877	13.9
-17	6.1	949	11.9	1072	11.8	1148	11.8	1876	13.8
-16	6.1	948	11.9	1073	11.8	1145	11.9	1876	13.8
-16	6.1	954	11.9	1069	11.8	1149	11.8	1878	13.8
625	11.9	956	11.9	1072	11.9	1155	11.9	1878	13.8
637	11.9	954	11.9	1077	11.9	1167	11.9	1878	13.6
644	11.9	957	11.9	1073	11.8	1163	11.6	1877	13.2
664	11.9	963	11.9	1074	11.9	996	10.5	1879	13.0
670	11.9	961	11.9	1079	11.8	1016	11.9	1880	13.0
672	11.9	961	11.9	1078	11.8	1139	12.5	1880	13.0
681	11.9	967	11.9	1076	11.8	1276	12.6	1880	12.9
695	11.9	967	11.9	1080	11.9	1319	12.6	1882	12.9
698	11.9	966	11.9	1083	11.9	1331	12.6	1883	12.9
704	11.9	970	11.9	1080	11.9	1339	12.6	1883	13.4
716	11.9	974	11.9	1080	11.8	1343	12.6	1884	13.6
722	11.9	972	11.9	1087	11.9	1347	12.6	1887	13.7
725	11.9	973	11.9	1084	11.8	1351	12.6	1888	13.7
732	11.9	979	11.9	1083	11.9	1353	12.6	1888	13.7
740	11.9	978	11.9	1088	11.9	1356	12.6	1888	13.7
743	11.9	977	11.9	1090	11.9	1359	12.6	1890	13.8
747	11.9	983	11.9	1086	11.9	1361	12.6	1892	13.8
755	11.9	985	11.9	1089	11.9	1362	12.6	1893	13.8
761	11.9	982	11.9	1093	11.9	1364	12.6	1893	13.8
763	11.9	986	11.9	1091	11.9	1366	12.6	1896	13.8
769	11.9	991	11.9	1090	11.9	1367	12.6	1899	13.8
779	11.9	989	11.9	1095	11.9	1368	12.6	1900	13.8
779	11.9	989	11.9	1096	11.9	1370	12.6	1899	13.8
779	11.9	995	11.9	1092	11.9	1372	12.6	1900	13.8
785	11.9	996	11.9	1096	11.9	1373	12.6	1903	13.8
793	11.9	994	11.9	1099	11.9	1375	12.6	1903	13.8
795	11.9	998	11.9	1096	11.9	1376	12.6	1904	13.8
798	11.9	1002	11.9	1097	11.9	1378	12.6	1906	13.8
804	11.9	999	11.9	1103	11.9	1379	12.6	1908	13.8
810	11.9	1001	11.9	1100	11.9	1382	12.6	1910	13.8
810	11.9	1006	11.9	1098	11.8	1394	12.7	1909	13.8
814	11.9	1004	11.9	1104	11.8	1402	12.7	1910	13.8
821	11.9	1003	11.8	1104	11.8	1423	12.8	1912	13.8
822	11.9	1008	11.9	1101	11.9	1446	12.8	1913	13.8
824	11.9	1010	11.9	1105	11.9	1468	12.9	1914	13.8
830	11.9	1007	11.9	1109	11.9	1493	13.0	1914	13.8
835	11.9	1012	11.9	1105	11.8	1520	13.1	1917	13.8
835	11.9	1016	11.9	1105	11.8	1545	13.2	1919	13.8
839	11.9	1013	11.9	1111	11.8	1570	13.2	1919	13.8
846	11.9	1014	11.9	1110	11.8	1603	13.3	1919	13.8
845	11.9	1019	11.9	1107	11.9	1621	13.4	1921	13.8
847	11.9	1019	11.9	1112	11.9	1650	13.5	1922	13.8
855	11.9	1017	11.9	1114	11.9	1662	13.5	1920	13.8

MARATHON OIL CO

TRIBAL C13 STEP-RATE TEST

Exhibit G

Treating Pressure (psi)	Injection Rate (bpm)	Treating Pressure (psi)	Injection Rate (bpm)	Treating Pressure (psi)	Injection Rate (bpm)	Treating Pressure (psi)	Injection Rate (bpm)	Treating Pressure (psi)	Injection Rate (bpm)
1920	13.7	1925	13.6	1985	13.6	2275	14.5	2379	14.6
1918	13.7	1927	13.6	1986	13.6	2279	14.5	2380	14.6
1917	13.7	1928	13.6	1987	13.6	2281	14.4	2381	14.6
1915	13.7	1928	13.6	1987	13.5	2282	14.4	2382	14.6
1913	13.7	1929	13.6	1988	13.5	2283	14.4	2383	14.6
1910	13.6	1929	13.6	1989	13.6	2284	14.4	2384	14.6
1904	13.5	1930	13.6	1989	13.6	2284	14.4	2384	14.6
1881	13.5	1930	13.6	1989	13.5	2286	14.4	2385	14.6
1876	13.5	1930	13.6	1990	13.5	2287	14.4	2384	14.6
1874	13.5	1932	13.6	1990	13.6	2289	14.4	2385	14.6
1873	13.6	1932	13.6	1990	13.6	2290	14.4	2385	14.6
1814	12.7	1934	13.6	1991	13.6	2292	14.5	2386	14.6
1811	13.8	1934	13.6	1991	13.6	2296	14.5	2387	14.6
1813	13.7	1936	13.6	1992	13.6	2297	14.5	2387	14.6
1816	12.5	1937	13.6	1993	13.6	2300	14.5	2389	14.6
1812	13.4	1938	13.6	1994	13.6	2305	14.5	2389	14.6
1809	13.4	1938	13.6	1996	13.6	2309	14.5	2391	14.6
1820	13.5	1938	13.6	1996	13.6	2313	14.5	2392	14.6
1826	13.5	1939	13.6	1997	13.6	2317	14.5	2393	14.6
1831	13.5	1939	13.6	1998	13.6	2321	14.6	2394	14.6
1839	13.5	1939	13.6	2002	13.6	2324	14.5	2394	14.6
1844	13.5	1940	13.6	1999	13.6	2327	14.6	2395	14.6
1849	13.6	1940	13.6	1999	13.6	2328	14.6	2395	14.6
1853	13.6	1940	13.6	1999	13.6	2329	14.6	2396	14.6
1857	13.6	1941	13.6	1999	13.6	2331	14.6	2396	14.6
1860	13.6	1942	13.6	1999	13.6	2332	14.6	2396	14.6
1863	13.6	1943	13.6	2000	13.6	2333	14.6	2398	14.6
1866	13.6	1944	13.6	2001	13.6	2334	14.5	2398	14.6
1868	13.6	1945	13.6	2001	13.6	2335	14.6	2399	14.6
1871	13.6	1946	13.6	2002	13.6	2336	14.6	2399	14.6
1873	13.6	1945	13.6	2003	13.6	2337	14.6	2400	14.6
1873	13.6	1946	13.6	2003	13.6	2338	14.6	2401	14.6
1876	13.6	1947	13.6	2004	13.6	2339	14.6	2400	14.6
1877	13.6	1948	13.6	2004	13.6	2340	14.6	2400	14.6
1879	13.6	1949	13.6	2005	13.6	2340	14.6	2400	14.6
1880	13.6	1949	13.6	2005	13.6	2340	14.5	2400	14.6
1881	13.6	1951	13.6	2005	13.6	2340	14.5	2400	14.6
1883	13.6	1951	13.6	2005	13.6	2340	14.5	2399	14.6
1884	13.6	1953	13.6	2005	13.6	2341	14.5	2399	14.6
1885	13.6	1953	13.6	2006	13.6	2342	14.5	2400	14.6
1886	13.6	1955	13.6	2007	13.6	2343	14.5	2401	14.6
1887	13.6	1955	13.6	2008	13.6	2343	14.6	2401	14.6
1887	13.6	1956	13.6	2010	13.6	2344	14.5	2402	14.6
1889	13.6	1956	13.6	2011	13.6	2344	14.6	2402	14.6
1889	13.6	1956	13.6	2012	13.6	2345	14.6	2403	14.6
1890	13.6	1957	13.6	2012	13.6	2346	14.6	2403	14.6
1891	13.6	1957	13.6	2012	13.6	2347	14.6	2403	14.6
1892	13.6	1957	13.6	2012	13.6	2348	14.6	2404	14.6
1894	13.6	1958	13.6	2012	13.6	2348	14.5	2404	14.6
1895	13.6	1958	13.6	2016	13.6	2348	14.5	2404	14.6
1897	13.6	1959	13.6	2013	13.6	2348	14.5	2405	14.6
1898	13.6	1959	13.6	2013	13.6	2348	14.5	2405	14.6
1899	13.6	1961	13.6	2014	13.6	2349	14.5	2405	14.6
1900	13.6	1962	13.6	2015	13.6	2349	14.5	2405	14.6
1901	13.6	1962	13.6	2015	13.6	2350	14.6	2406	14.6
1902	13.6	1963	13.6	2016	13.6	2352	14.6	2405	14.6
1902	13.6	1964	13.6	2017	13.6	2353	14.6	2406	14.6
1902	13.6	1965	13.6	2018	13.6	2356	14.6	2406	14.6
1903	13.6	1966	13.6	2018	13.6	2358	14.6	2406	14.6
1904	13.6	1966	13.6	2018	13.6	2359	14.6	2406	14.6
1905	13.6	1967	13.6	2020	13.6	2362	14.6	2406	14.6
1906	13.6	1968	13.6	2020	13.6	2363	14.6	2408	14.6
1907	13.6	1969	13.6	2020	13.6	2365	14.6	2407	14.6
1908	13.6	1969	13.6	2021	13.6	2366	14.6	2407	14.6
1908	13.6	1970	13.6	2021	13.6	2367	14.6	2409	14.6
1909	13.6	1971	13.6	2022	13.6	2369	14.6	2404	14.5
1909	13.6	1972	13.6	2023	13.6	2369	14.6	2405	14.5
1911	13.6	1972	13.6	2024	13.6	2371	14.6	2404	14.6
1911	13.6	1972	13.6	2024	13.6	2373	14.6	2406	14.6
1911	13.6	1973	13.6	2024	13.6	2373	14.6	2410	14.6
1912	13.6	1973	13.6	2025	13.6	2374	14.6	2410	14.6
1912	13.6	1973	13.6	2024	13.6	2374	14.6	2415	14.6
1914	13.6	1974	13.6	2025	13.6	2375	14.6	2415	14.6
1914	13.6	1975	13.6	2024	13.6	2374	14.6	2417	14.7
1916	13.6	1976	13.6	2025	13.6	2375	14.6	2419	14.7
1918	13.6	1976	13.6	2025	13.6	2375	14.6	2420	14.7
1918	13.6	1977	13.6	2027	13.6	2375	14.6	2420	14.7
1920	13.6	1977	13.6	2031	13.6	2376	14.6	2422	14.7
1920	13.6	1978	13.6	2033	13.6	2376	14.6	2422	14.7
1921	13.6	1979	13.6	2034	13.6	2377	14.6	2423	14.7
1921	13.6	1980	13.6	2034	13.6	2377	14.6	2424	14.7
1922	13.6	1981	13.6	2034	13.6	2378	14.6	2426	14.7
1922	13.6	1981	13.6	2035	13.6	2379	14.6	2432	14.8
1922	13.6	1982	13.6	2064	13.9	2379	14.6	2456	14.9
1923	13.6	1984	13.5	2159	14.3	2379	14.6	2488	14.9
1924	13.6	1984	13.6	2224	14.4	2378	14.6	2509	15.0
1925	13.6	1985	13.5	2253	14.4	2379	14.6	2533	15.0

MARATHON OIL CO

TRIBAL C13 STEP-RATE TEST

Exhibit G

Treating Pressure (psi)	Injection Rate (bpm)	Treating Pressure (psi)	Injection Rate (bpm)	Treating Pressure (psi)	Injection Rate (bpm)	Treating Pressure (psi)	Injection Rate (bpm)	Treating Pressure (psi)	Injection Rate (bpm)
2544	15.1	2585	14.8	3024	16.3	3157	16.5	3795	17.9
2552	15.1	2568	14.8	3025	16.3	3159	16.5	3799	17.9
2556	15.1	2569	14.9	3028	16.3	3162	16.5	3813	17.9
2561	15.1	2583	15.1	3034	16.3	3162	16.5	3812	17.9
2568	15.2	2601	15.1	3036	16.3	3164	16.5	3805	17.9
2571	15.2	2608	15.1	3040	16.3	3164	16.5	3802	17.9
2576	15.2	2622	15.2	3045	16.3	3164	16.5	3808	17.8
2580	15.2	2628	15.2	3047	16.3	3166	16.5	3813	17.9
2583	15.2	2633	15.2	3051	16.3	3162	16.4	3807	17.9
2586	15.2	2639	15.2	3055	16.3	3159	16.4	3801	17.8
2590	15.2	2643	15.2	3055	16.3	3156	16.4	3802	17.8
2594	15.2	2648	15.2	3059	16.3	3151	16.3	3810	17.8
2597	15.2	2650	15.2	3061	16.3	3148	16.3	3812	17.8
2601	15.2	2653	15.2	3062	16.3	3144	16.3	3804	17.9
2603	15.2	2654	15.2	3066	16.3	3141	16.3	3803	17.9
2606	15.2	2656	15.2	3066	16.3	3141	16.3	3807	17.9
2609	15.2	2657	15.2	3067	16.3	3137	16.3	3818	17.9
2611	15.2	2657	15.2	3069	16.3	3135	16.3	3814	17.9
2613	15.2	2657	15.2	3069	16.3	3134	16.3	3807	17.9
2616	15.2	2657	15.2	3072	16.3	3131	16.3	3809	17.8
2618	15.2	2657	15.2	3073	16.3	3132	16.3	3817	17.9
2620	15.2	2657	15.2	3073	16.3	3131	16.3	3823	17.9
2621	15.2	2657	15.2	3076	16.3	3130	16.3	3788	17.7
2623	15.2	2658	15.2	3076	16.3	3134	16.3	3784	17.8
2624	15.2	2659	15.2	3076	16.3	3133	16.3	3792	17.9
2625	15.2	2660	15.2	3079	16.3	3133	16.3	3825	17.9
2625	15.2	2661	15.2	3078	16.3	3136	16.3	3828	17.9
2625	15.2	2661	15.2	3078	16.3	3135	16.3	3822	17.9
2627	15.2	2661	15.2	3079	16.3	3137	16.3	3821	17.9
2627	15.2	2660	15.2	3080	16.3	3138	16.3	3825	17.9
2629	15.2	2660	15.2	3084	16.3	3137	16.3	3839	17.9
2630	15.2	2659	15.1	3086	16.3	3138	16.3	3838	17.9
2632	15.2	2658	15.1	3086	16.4	3143	16.4	3831	17.9
2633	15.2	2659	15.1	3091	16.3	3156	16.6	3830	17.9
2633	15.2	2659	15.1	3093	16.4	3229	16.8	3835	17.9
2634	15.2	2659	15.1	3093	16.4	3283	17.0	3842	17.9
2635	15.2	2659	15.1	3093	16.4	3331	17.1	3837	17.9
2635	15.2	2660	15.1	3095	16.3	3353	17.2	3830	17.9
2634	15.2	2661	15.2	3094	16.4	3417	17.3	3830	17.9
2634	15.2	2662	15.2	3097	16.4	3423	17.3	3838	17.9
2634	15.2	2663	15.2	3100	16.4	3468	17.3	3843	17.8
2634	15.2	2663	15.2	3098	16.4	3470	17.3	3837	17.8
2634	15.2	2665	15.2	3100	16.3	3466	17.3	3830	17.8
2635	15.2	2667	15.2	3100	16.3	3362	17.4	3832	17.8
2636	15.2	2668	15.2	3098	16.3	3412	17.4	3839	17.8
2637	15.2	2670	15.2	3100	16.3	3438	17.5	3841	17.8
2638	15.2	2670	15.2	3101	16.3	3484	17.6	3833	17.8
2639	15.2	2670	15.2	3101	16.3	3523	17.7	3829	17.8
2639	15.2	2672	15.2	3103	16.3	3571	17.8	3834	17.8
2640	15.2	2675	15.2	3102	16.4	3578	17.9	3841	17.8
2640	15.2	2678	15.2	3104	16.4	3624	17.9	3840	17.9
2642	15.2	2681	15.2	3106	16.4	3674	18.0	3832	17.8
2642	15.2	2683	15.2	3106	16.4	3681	18.1	3832	17.8
2642	15.2	2685	15.3	3110	16.4	3683	18.1	3838	17.8
2643	15.2	2688	15.3	3110	16.4	3685	18.1	3844	17.8
2643	15.2	2691	15.3	3110	16.4	3574	17.9	3838	17.8
2645	15.2	2692	15.3	3112	16.3	3616	17.6	3833	17.8
2645	15.2	2694	15.3	3110	16.4	3606	17.4	3835	17.8
2647	15.2	2695	15.3	3112	16.4	3590	17.4	3843	17.8
2648	15.2	2698	15.3	3114	16.4	3588	17.4	3845	17.8
2648	15.2	2700	15.3	3113	16.4	3595	17.4	3836	17.8
2649	15.2	2700	15.3	3114	16.4	3613	17.4	3832	17.8
2649	15.2	2701	15.3	3114	16.3	3620	17.6	3834	17.8
2650	15.2	2703	15.3	3112	16.4	3640	17.8	3842	17.8
2649	15.2	2705	15.3	3114	16.3	3690	17.8	3837	17.8
2650	15.2	2704	15.3	3113	16.3	3748	17.9	3824	17.8
2649	15.2	2706	15.3	3114	16.4	3783	17.9	3823	17.8
2648	15.2	2710	15.3	3116	16.3	3783	17.9	3830	17.8
2648	15.2	2741	15.4	3115	16.3	3780	17.9	3834	17.8
2648	15.2	2782	15.6	3116	16.3	3781	17.9	3826	17.8
2649	15.2	2806	15.7	3117	16.3	3793	17.9	3822	17.8
2649	15.2	2836	15.8	3115	16.3	3799	17.9	3823	17.8
2650	15.2	2863	15.8	3116	16.3	3794	17.9	3833	17.8
2651	15.2	2885	15.9	3117	16.3	3791	17.9	3832	17.8
2651	15.2	2896	15.9	3117	16.3	3795	17.9	3826	17.8
2651	15.2	2926	16.0	3122	16.4	3802	17.9	3824	17.8
2651	15.2	2944	16.0	3123	16.4	3803	17.9	3830	17.8
2652	15.2	2966	16.1	3124	16.4	3793	17.9	3841	17.8
2651	15.2	2976	16.2	3130	16.4	3791	17.9	3835	17.8
2651	15.2	2983	16.2	3134	16.4	3796	17.9	3829	17.8
2652	15.2	2990	16.2	3140	16.5	3803	17.9	3830	17.8
2652	15.2	2995	16.2	3145	16.5	3798	17.9	3838	17.8
2652	15.2	3000	16.2	3146	16.4	3792	17.9	3841	17.8
2653	15.2	3005	16.2	3150	16.4	3794	17.9	3832	17.8
2653	15.2	3011	16.2	3150	16.4	3801	17.9	3832	17.8
2638	15.1	3016	16.2	3151	16.4	3805	17.9	3853	17.9
2615	14.9	3018	16.3	3155	16.5	3798	17.9	3925	18.0

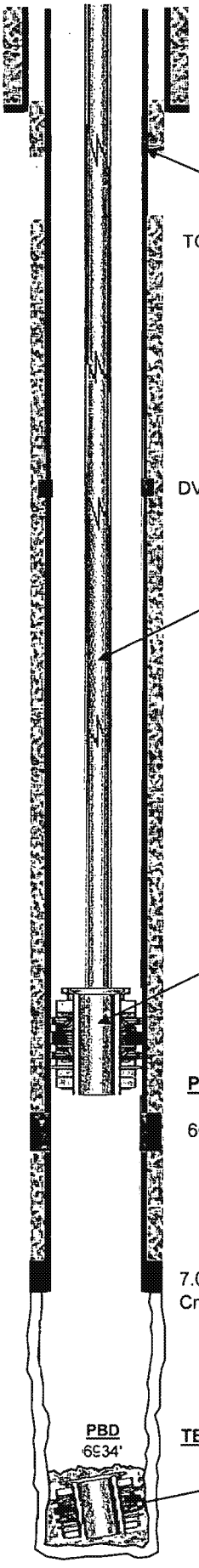
Exhibit G

Treating Pressure (psi)	Injection Rate (bpm)	Treating Pressure (psi)	Injection Rate (bpm)	Treating Pressure (psi)	Injection Rate (bpm)	Treating Pressure (psi)	Injection Rate (bpm)	Treating Pressure (psi)	Injection Rate (bpm)
3931	18.1	4377	19.0	4570	19.5	4558	19.4	4546	19.7
3931	18.1	4381	19.0	4561	19.5	4560	19.4	4552	19.7
3936	18.1	4368	19.0	4561	19.5	4572	19.4	4588	19.7
3959	18.1	4362	19.0	4566	19.5	4587	19.4	4595	19.7
3966	18.1	4360	19.1	4573	19.5	4591	19.4	4591	19.7
3960	18.1	4366	19.0	4579	19.5	4588	19.4	4580	19.7
3956	18.1	4373	19.1	4582	19.5	4563	19.4	4565	19.6
3958	18.1	4374	19.1	4579	19.5	4560	19.4	4561	19.6
3996	18.2	4366	19.1	4562	19.5	4557	19.4	4563	19.6
4001	18.2	4362	19.1	4558	19.5	4569	19.4	4589	19.6
4001	18.3	4362	19.1	4561	19.5	4574	19.4	4601	19.6
4013	18.4	4369	19.1	4563	19.5	4598	19.4	4593	19.6
4066	18.5	4375	19.1	4580	19.5	4600	19.4	4552	19.6
4125	18.6	4374	19.1	4598	19.5	4595	19.4	4546	19.6
4137	18.6	4364	19.1	4598	19.5	4587	19.4	4550	19.6
4132	18.6	4360	19.1	4564	19.5	4577	19.4	4558	19.6
4129	18.6	4363	19.0	4557	19.5	4577	19.4	4566	19.6
4134	18.6	4378	19.1	4556	19.5	4576	19.4	4573	19.6
4141	18.6	4380	19.1	4556	19.5	4591	19.4	4578	19.6
4141	18.6	4374	19.1	4563	19.5	4595	19.4	4577	19.6
4135	18.6	4365	19.1	4588	19.5	4595	19.4	4569	19.6
4139	18.6	4366	19.1	4590	19.5	4596	19.4	4563	19.6
4175	18.6	4370	19.1	4586	19.5	4578	19.4	4563	19.6
4180	18.7	4379	19.1	4579	19.5	4574	19.3	4582	19.6
4176	18.7	4378	19.1	4571	19.5	4571	19.4	4599	19.6
4171	18.7	4371	19.1	4568	19.5	4575	19.4	4602	19.6
4175	18.7	4364	19.1	4572	19.5	4579	19.4	4596	19.6
4193	18.7	4366	19.0	4575	19.5	4590	19.3	4589	19.6
4198	18.7	4378	19.1	4580	19.5	4591	19.3	4583	19.6
4194	18.7	4383	19.0	4588	19.5	4589	19.3	4578	19.6
4193	18.7	4376	19.0	4583	19.5	4558	19.3	4579	19.6
4199	18.7	4367	19.0	4566	19.5	4556	19.3	4590	19.6
4217	18.7	4368	19.0	4563	19.5	4555	19.3	4607	19.6
4219	18.7	4373	19.0	4563	19.5	4567	19.3	4606	19.6
4215	18.8	4380	19.0	4563	19.5	4577	19.3	4602	19.6
4216	18.8	4377	19.0	4576	19.5	4603	19.3	4587	19.6
4245	18.9	4366	19.0	4586	19.5	4602	19.3	4579	19.6
4270	18.9	4363	19.0	4588	19.5	4596	19.3	4578	19.6
4273	18.9	4365	19.0	4585	19.5	4572	19.3	4583	19.6
4269	18.9	4380	19.0	4567	19.5	4571	19.3	4593	19.6
4271	19.0	4380	19.0	4563	19.5	4571	19.3	4598	19.6
4278	19.0	4372	19.0	4563	19.5	4578	19.3	4598	19.6
4324	19.0	4364	19.0	4564	19.5	4584	19.3	4581	19.6
4329	19.0	4363	19.0	4577	19.5	4591	19.3	4563	19.6
4327	19.0	4367	19.0	4595	19.5	4587	19.3	4566	19.6
4321	19.0	4375	19.0	4595	19.5	4581	19.3	4572	19.6
4321	19.0	4372	19.0	4591	19.4	4572	19.3	4579	19.6
4328	19.0	4363	19.0	4566	19.4	4572	19.3	4593	19.6
4341	19.0	4359	19.0	4562	19.4	4574	19.3	4599	19.6
4337	19.0	4361	19.0	4562	19.4	4583	19.3	4586	19.5
4329	19.0	4367	19.0	4564	19.4	4593	19.3	4581	19.5
4326	19.0	4373	19.0	4588	19.5	4598	19.3	4579	19.5
4330	19.0	4367	19.0	4592	19.4	4592	19.3	4579	19.5
4344	19.0	4358	19.0	4593	19.5	4581	19.3	4584	19.6
4345	19.0	4357	19.0	4587	19.5	4575	19.3	4605	19.6
4338	19.0	4363	19.0	4574	19.4	4576	19.3	4609	19.5
4332	19.0	4379	19.0	4569	19.5	4579	19.3	4610	19.5
4332	19.0	4379	19.0	4569	19.4	4590	19.3	4598	19.5
4338	19.0	4372	19.0	4571	19.4	4524	19.8	4587	19.6
4338	19.0	4367	19.0	4603	19.5	4541	19.8	4587	19.5
4348	19.0	4370	19.1	4605	19.5	4544	19.8	4589	19.5
4349	19.0	4394	19.1	4601	19.5	4537	19.8	4599	19.5
4347	19.1	4408	19.1	4583	19.5	4533	19.8	4622	19.5
4349	19.1	4414	19.1	4574	19.5	4534	19.8	4622	19.5
4355	19.1	4413	19.2	4571	19.4	4538	19.8	4614	19.5
4374	19.1	4426	19.4	4570	19.5	4550	19.8	4596	19.5
4380	19.1	4472	19.4	4575	19.5	4562	19.8	4585	19.5
4374	19.1	4528	19.5	4593	19.4	4559	19.8	4587	19.5
4368	19.1	4564	19.5	4595	19.4	4536	19.7	4588	19.5
4368	19.1	4570	19.5	4591	19.4	4521	19.7	4606	19.5
4372	19.1	4570	19.5	4566	19.4	4521	19.7		
4378	19.1	4567	19.5	4565	19.4	4517	19.7		
4376	19.0	4561	19.5	4564	19.4	4518	19.7		
4368	19.0	4556	19.5	4568	19.5	4526	19.7		
4363	19.1	4556	19.5	4581	19.5	4535	19.7		
4365	19.1	4563	19.5	4587	19.4	4542	19.7		
4371	19.1	4589	19.5	4590	19.4	4543	19.7		
4376	19.1	4590	19.5	4572	19.4	4537	19.7		
4371	19.0	4586	19.5	4566	19.4	4535	19.7		
4363	19.0	4578	19.5	4562	19.4	4540	19.7		
4359	19.0	4563	19.5	4563	19.4	4547	19.7		
4363	19.0	4558	19.5	4570	19.4	4580	19.7		
4376	19.0	4563	19.5	4577	19.4	4597	19.7		
4378	19.0	4575	19.5	4584	19.4	4599	19.7		
4363	19.0	4581	19.5	4579	19.4	4574	19.7		
4357	19.0	4581	19.5	4569	19.4	4549	19.7		
4360	19.0	4576	19.5	4556	19.4	4545	19.7		

TRIBAL C13

Exhibit G

KB = 13 ft



10.0" OD / 40.5# / J55 @ 711'
Cmt'd w/ 430 sx (Circulated to Surface)

Casing Leak Isolated fr/ 1370 - 1400 ft.
Cement Squeezed Leak w/ 270 sx

TOC @ 2125' by Temp. Survey

FINAL WELL CONFIGURATION

DV TOOL @ 3758' (Driller's Tally)

3.5" OD Internally Coated Tubing String

Retrievable Coated Injection Packer
Set @ 6613 ft

PHOSPHORIA

6665 - 6690' @ 4 HPF

7.0" OD / 23# / N80 @ 6862'
Cmt'd w/ 1200 sx (Two Stage)

PBD
6934'

TENSLEEP OPENHOLE

Packer Fish Cemented In Openhole

TD = 7051'

Marathon Oil Company

TRIBAL C13			
990' FSL / 330' FEL / Sec. #30 / T04N / R01W FREMONT COUNTY, WYOMING			
DATE: 6/16/2009		ORIGINATOR: Ramseier	FILE:

Exhibit G

Mechanical Integrity Test
Casing or Annulus Pressure Mechanical Integrity Test

U.S. Environmental Protection Agency
Underground Injection Control Program, UIC Direct Implementation Program 8P-W-GW
999 18th Street, Suite 500 Denver, CO 80202-2466

EPA Witness: _____ Date: 5 / 19 / 09

Test conducted by: John Schilling, MOC + Chris O'brien, Dry Creek

Others present: _____

Well Name: Tribal 'C' # 13 (WY21098 - 07393) Type: ER SWD Status: AC TA UC

Field: STEAMBOAT

Location: SESE 994' FSL, 320' FEL Sec: 30 T 4N R 1W County: FREMONT State: WY

Last MIT: NEW CONVERSION Maximum Allowable Pressure: 1820 PSIG

Is this a regularly scheduled test? [ ]Yes [ ] No

Initial test for permit? [X] Yes [ ] No

Test after well rework? [ ] Yes [ ] No

Well injection during test? [ ] Yes [X] No If Yes, rate: 0 bpd

Pre-test casing/tubing annulus pressure: 0 psig

MIT DATA TABLE	TEST #1	TEST #2	TEST #3
TUBING	*PRESSURE*		
Initial Pressure	0 psig	psig	psig
End of test pressure	0 psig	psig	psig
CASING / TUBING	*ANNULUS*	*PRESSURE*	
2:26 pm 0 minutes	1000 psig	psig	psig
2:31 5 minutes	970 psig	psig	psig
2:36 10 minutes	950 psig	psig	psig
2:41 15 minutes	930 psig	psig	psig
2:46 20 minutes	920 psig	psig	psig
2:51 25 minutes	915 psig	psig	psig
2:56 30 minutes	910 psig	psig	psig
minutes	psig	psig	psig
minutes	psig	psig	psig
RESULTS	[X] Pass [ ] Fail	[ ] Pass [ ] Fail	[ ] Pass [ ] Fail

Does the annulus pressure build back up after the test? [ ] Yes [X] No

ED_013883_00001617-00059

Exhibit G

MECHANICAL INTEGRITY PRESSURE TEST

Additional comments for mechanical integrity pressure test, such as volume of fluid added to annulus and bled back at end of test, reason for failing test (casing head leak, tubing leak, other), etc. :

Signature of Witness: Chris O'Brien D.C.

OFFICE USE ONLY – COMPLIANCE FOLLOW-UP

Staff: _____ Date: ___/___/___

Do you agree with the reported test results? [ ] YES [ ] NO

If not, why? _____

Possible violation identified? [ ] YES [ ] NO

If YES, what: _____

IF YES, follow-up initiated? [ ] YES _____

[ ] NO - why not? _____

[ ] Data Entry **[ ] Compliance Staff** **[ ] 2nd Data Entry** **[ ] Hardcopy Filing**

ED_013883_00001617-00060

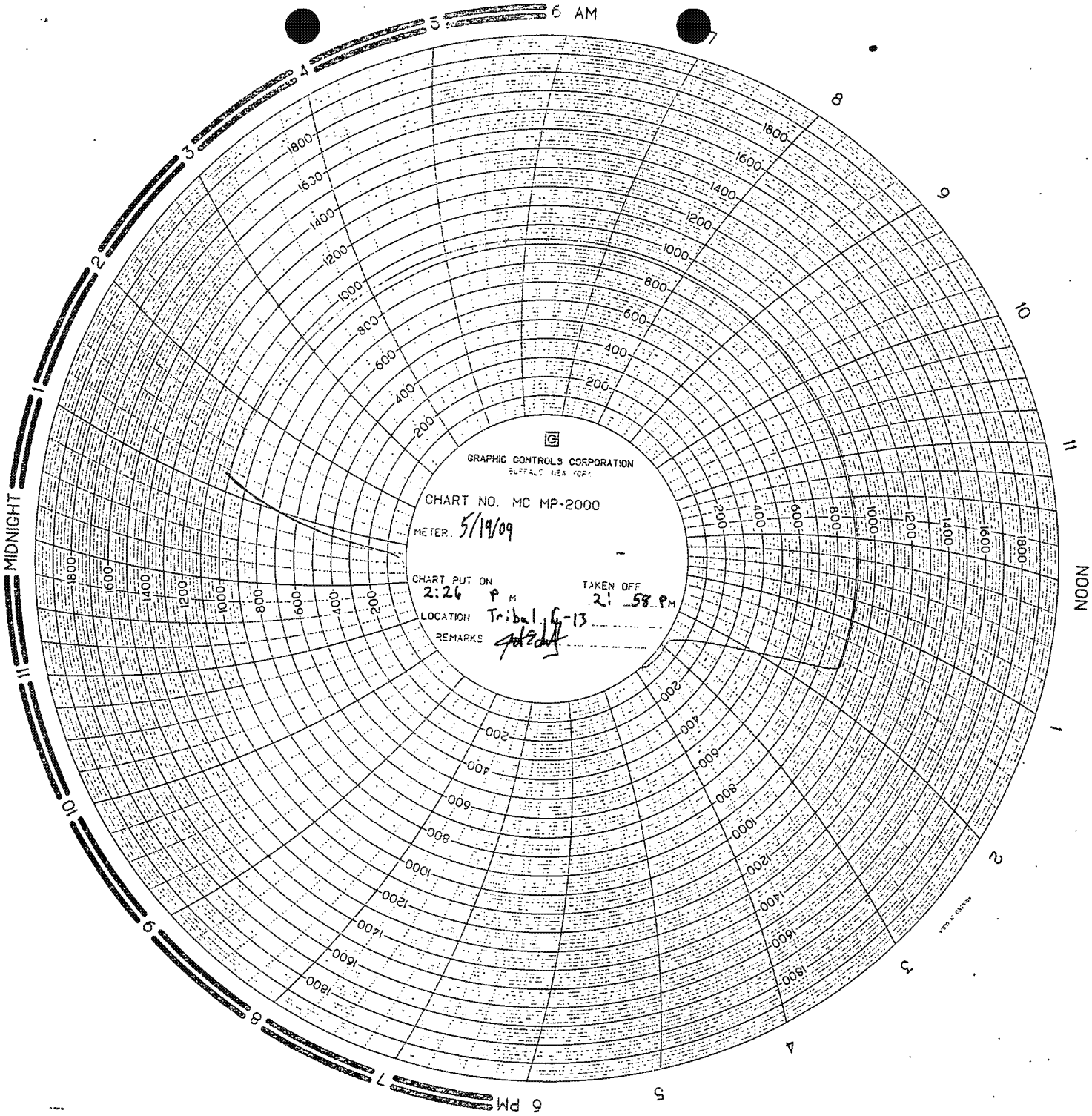

6 AM
6 PM
MIDNIGHT
NOON
GRAPHIC CONTROLS CORPORATION
CHART NO. MC MP-2000
METER 5/19/09
CHART PUT ON 2:26 P M
TAKEN OFF 2:58 PM
LOCATION Tribal G-13
REMARKS

Exhibit G

HALLIBURTON

CEMENT BOND LOG

5"=100FT

Company MARATHON OIL COMPANY
Well TRIBAL C-13
Field STEAMBOAT
County FREMONT State WY

Company MARATHON OIL COMPANY
Well TRIBAL C-13
Field STEAMBOAT
County FREMONT State WY

API No.: N/A Serv #: 6568352
Location: 994'FSL & 320'FEL

Sec: 30 Twp: 4N Rge: 1W

Other Services

Permanent Datum	G.L.	Elevation	5761'
Log Measured From	K.B.	13 Ft. above perm. datum	
Drilling Measured From	K.B.		

Elevation
K.B. 5764'
D.F. 5763'
G.L. 5761'

Date @ Time Logged	03/18/09 16:00PM	Type Fluid in Hole	WATER
Run No.	ONE	Density of Fluid	8.34#
Depth - Driller	6750'	Fluid Level	FULL
Depth - Logger	6578'	Cement Top Est. Logged	LOGGED
Bottom - Logged Interval	6578'	Equipment / Location	10026058 / CASPER
Top - Log Interval	4000'	Recorded by	BILL HAINES
Max. Recorded Temp.	N/A	Witnessed by	JOHN SCHILLING

CEMENTING DATA	Surface String	Protection String	Production String	Liner
Date / Time Cemented				
Primary / Squeeze				
Expected Compressive Strength	psi@ hrs	psi@ hrs	psi@ hrs	psi@ hrs
Cement Volume				
Cement Type / Weight	/	/	/	/
Formulation				
Mud Type / Mud Wgt.	/	/	/	/

Borehole Record				Casing & Tubing Record			
Run Number	Bit	From	To	Size	Weight	From	To
				10"	40"	SURF	711'
				7"	23#	SURF	6750'

<<< Fold Here >>>

Exhibit G

WellView

Schematic - Current

Well Name: Tribal C 13

API/UWI	Lease Line Legal Desc	Field Name	License #	State/Province	Well Configuration Type
490130646400	SESE, Sec. 30, T4N, R1W, 6th PM	Steamboat Butte		WYOMING	
Original KB Elevation (ft)	**KB-Tubing Head Distance (ft)**	**Original Spud Date**	**Rig Release Date**	**PBTD (All) (ftKB)**	**Total Depth All (TVD) (ftKB)**
5,764.00	5,764.00	1/1/1900 00:00	5/18/2005 00:00		

Most Recent Job

Job Category	Primary Job Type	Secondary Job Type	Job Start Date	Job End Date
Testing	Pressure Build-up/Survey	Wireline	6/29/2020	6/29/2020

TD: 7,064.0

TRIBAL C 13, 12/28/2020 5:52:15 PM

MD (ftKB)	Vertical schematic (actual)
13.1	
81.0	CASING JOINT(S); 13.0-81.0; 68.00; 1-1; 16; 15.25
90.9	
711.0	CASING JOINT(S); 13.2-711.0; 697.84; 2-1; 10 3/4; 10.05
716.9	
1,370.1	
1,399.9	
2,125.0	CASING JOINT(S); 13.0-3,755.3; 3,742.25; 3-1; 7; 6.46
3,075.1	
3,701.1	Tubing - IPC; 13.0-6,609.6; 6,596.56; 3-1; 3 1/2; 2.99
3,755.2	
3,757.9	STAGE COLLAR; 3,755.3-3,757.8; 2.50; 3-2; 7
4,245.1	
4,450.1	
4,609.9	
4,696.9	
4,743.1	
4,884.8	
5,000.0	
5,169.9	
5,356.0	CASING JOINT(S); 3,757.8-6,775.0; 3,017.20; 3-3; 7
5,473.1	
6,555.1	
6,609.6	
6,615.5	Packer - Nickel Coated; 6,609.6-6,615.6; 6.00; 3-2; 7; 3.50
6,653.9	Perf; 6,665.0-6,690.0; 2/18/2000
6,665.0	Perf; 6,665.0-6,690.0; 2/18/2000
6,690.0	Phosphoria; 6,665.0-6,690.0; 1/20/2000
6,774.9	
6,776.9	CASING FLOAT COLLAR; 6,775.0-6,777.0; 2.01; 3-4; 7
6,837.9	CASING JOINT(S); 6,777.0-6,861.1; 84.12; 3-5; 7
6,861.2	
6,861.9	CASING GUIDE SHOE; 6,861.1-6,862.0; 0.90; 3-6; 7
6,863.8	
6,926.8	
6,934.1	
6,960.0	
6,961.9	Tensleep Open Hole; 6,862.0-7,064.0; 6/21/1951
7,064.0	

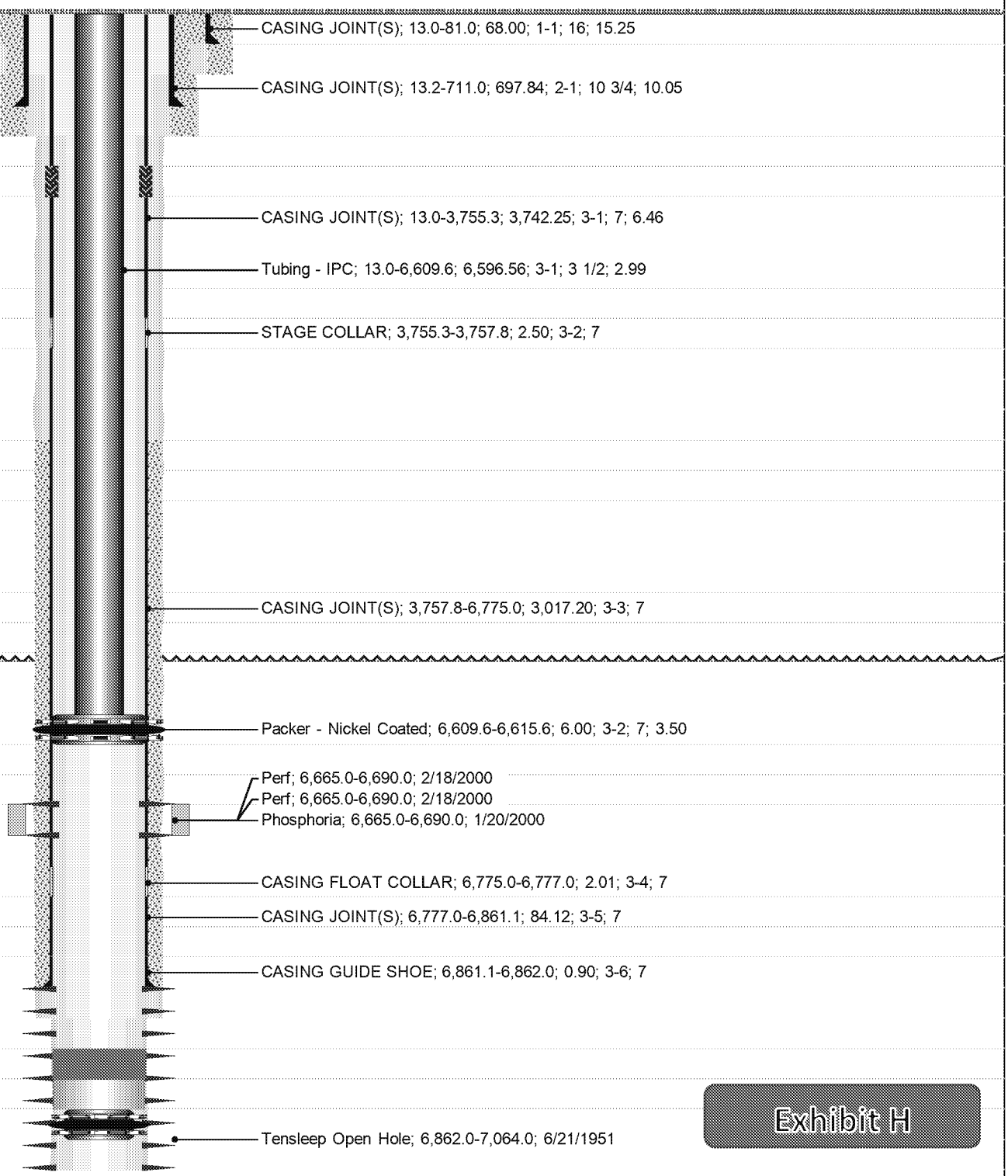


Exhibit H

Tribal C #13
Steamboat Butte Field
Plugging Plan

December 29, 2020

WELL DATA:

Location: 994' FSL, 320' FEL, Sec. 30, T4N, RlW Fremont County, Wyoming

Elevation: GL: 5751' KB: 5764'

Depth: TD: 7051' PBTD: 6934' (cmt top- pkr cemented in hole)

Casing:

Surface.....10 3/4", 40.5#, J-55, set at 711' with 430 sxs cement (cmt to surface)

Production.....7", 23#, N-80, set at 6862' with 1200 sxs cement, cement top at 2125' by temperature survey
2 stage job, DV at 3758'

Current Perforations:

Tensleep 6862'-6934' (6 1/4" open hole)

Phosphoria 6665'- 90' (4 SPF)

Current Test: Injecting ~500 BWIP with 0 psi on tubing (vacuum).

Current Status: Active commingled Phosphoria and Tensleep Class II – EOR injector

Proposed Status: Active commingled Phosphoria and Tensleep Class II – SWD

Estimated P & A Cost: $80,000

Plugging Procedure: Prior to abandonment, the well shall be plugged in a manner that isolates the injection zone and prevents movement of fluid into or between USDWs, and in accordance with any applicable Federal, State or local law or regulation. Tubing, packer and other downhole apparatus shall be removed. Cement with additives such as accelerators and retarders that control or enhance cement properties may be used for plugs; however, volume-extending additives and gel cements are not approved for plug use. Plug placement shall be verified by tagging. Plugging gel of at least 9.6 lb/gal shall be placed between all plugs. A minimum 50 ft surface plug shall be set inside and outside of the surface casing to seal pathways for fluid migration into the subsurface. Within sixty (60) days after plugging the owner or operator shall submit Plugging Record (EPA Form 7520 13) to the Director. The Plugging Record must be certified as accurate and complete by the person responsible for the plugging operation.

Exhibit I