

Confidentiality Requested:

Yes No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

Form ACO-1

January 2018

Form must be Typed

Form must be Signed

All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # _____

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip: _____ + _____

Contact Person: _____

Phone: (_____) _____

CONTRACTOR: License # _____

Name: _____

Wellsite Geologist: _____

Purchaser: _____

Designate Type of Completion:

New Well Re-Entry Workover

Oil WSW SWD

Gas DH EOR

OG GSW

CM (Coal Bed Methane)

Cathodic Other (Core, Expl., etc.): _____

If Workover/Re-entry: Old Well Info as follows:

Operator: _____

Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____

Deepening Re-perf. Conv. to EOR Conv. to SWD

Plug Back Liner Conv. to GSW Conv. to Producer

Commingled Permit #: _____

Dual Completion Permit #: _____

SWD Permit #: _____

EOR Permit #: _____

GSW Permit #: _____

Spud Date or Date Reached TD Completion Date or Recompletion Date

API No.: _____

Spot Description: _____

_____ - _____ - _____ Sec. _____ Twp. _____ S. R. _____ East West

_____ Feet from North / South Line of Section

_____ Feet from East / West Line of Section

Footages Calculated from Nearest Outside Section Corner:

NE NW SE SW

GPS Location: Lat: _____, Long: _____
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum: NAD27 NAD83 WGS84

County: _____

Lease Name: _____ Well #: _____

Field Name: _____

Producing Formation: _____

Elevation: Ground: _____ Kelly Bushing: _____

Total Vertical Depth: _____ Plug Back Total Depth: _____

Amount of Surface Pipe Set and Cemented at: _____ Feet

Multiple Stage Cementing Collar Used? Yes No

If yes, show depth set: _____ Feet

If Alternate II completion, cement circulated from: _____

feet depth to: _____ w/ _____ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: _____ ppm Fluid volume: _____ bbls

Dewatering method used: _____

Location of fluid disposal if hauled offsite:

Operator Name: _____

Lease Name: _____ License #: _____

Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West

County: _____ Permit #: _____

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY

Confidentiality Requested

Date: _____

Confidential Release Date: _____

Wireline Log Received Drill Stem Tests Received

Geologist Report / Mud Logs Received

UIC Distribution

ALT I II III Approved by: _____ Date: _____

Operator Name: _____ Lease Name: _____ Well #: _____

Sec. _____ Twp. _____ S. R. _____ East West County: _____

INSTRUCTIONS: Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No Geologist Report / Mud Logs <input type="checkbox"/> Yes <input type="checkbox"/> No List All E. Logs Run:	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum
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CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone				

1. Did you perform a hydraulic fracturing treatment on this well? Yes No *(If No, skip questions 2 and 3)*
2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? Yes No *(If No, skip question 3)*
3. Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? Yes No *(If No, fill out Page Three of the ACO-1)*

Date of first Production/Injection or Resumed Production/Injection:	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____				
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

DISPOSITION OF GAS: <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	METHOD OF COMPLETION: <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <i>(Submit ACO-4)</i>	PRODUCTION INTERVAL: Top Bottom
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Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record <i>(Amount and Kind of Material Used)</i>

TUBING RECORD:	Size:	Set At:	Packer At:	
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Form	ACO1 - Well Completion
Operator	Orca Operating Company LLC
Well Name	SHOFFNER SWD 12-1
Doc ID	1465606

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Conductor	20	16	48	120	Grout	270	Class A
Surface	12.25	9.625	40	1657	AA	350	Class A
Surface	12.25	9.625	40	1657	Comm	200	Class A
Production	8.75	7	26	4318	Class H	175	Class H



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Orca Operating Co
 427 S Boston Ste 400
 Tulsa, OK 74103
 ATTN: Harold Watts

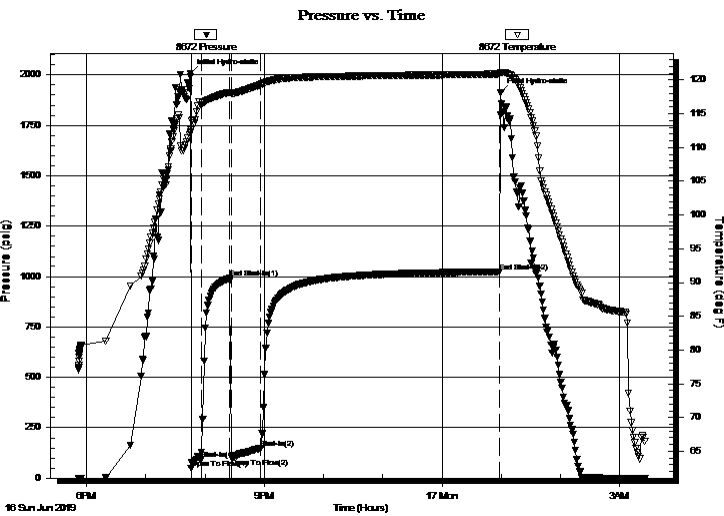
12-25S-9W Reno
Shoffner 12-1
 Job Ticket: 65876 **DST#: 2**
 Test Start: 2019.06.16 @ 17:52:00

GENERAL INFORMATION:

Formation: **Mississippi**
 Deviated: No Whipstock: ft (KB)
 Time Tool Opened: 19:45:47
 Time Test Ended: 03:25:47
 Interval: **3837.00 ft (KB) To 3875.00 ft (KB) (TVD)**
 Total Depth: 3875.00 ft (KB) (TVD)
 Hole Diameter: 8.75 inches Hole Condition: Good
 Test Type: Conventional Bottom Hole (Reset)
 Tester: Leal Cason
 Unit No: 74
 Reference Elevations: 1657.00 ft (KB)
 1644.00 ft (CF)
 KB to GR/CF: 13.00 ft

Serial #: 8672 **Inside**
 Press@RunDepth: 148.87 psig @ 3838.00 ft (KB) Capacity: psig
 Start Date: 2019.06.16 End Date: 2019.06.17 Last Calib.: 2019.06.17
 Start Time: 17:52:01 End Time: 03:25:47 Time On Btm: 2019.06.16 @ 19:45:02
 Time Off Btm: 2019.06.17 @ 00:59:32

TEST COMMENT: IF: Fair Blow , Built to 7 1/2 inches
 IS: No Blow Back
 FF: Fair Blow , BOB in 20 minutes, Built to 17 1/2 inches
 FS: No Blow Back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2007.90	112.20	Initial Hydro-static
1	48.68	112.60	Open To Flow (1)
11	94.08	116.39	Shut-In(1)
40	991.26	118.17	End Shut-In(1)
42	100.56	118.00	Open To Flow (2)
72	148.87	119.29	Shut-In(2)
313	1023.99	120.91	End Shut-In(2)
315	1911.08	121.12	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	90 GIP	0.00
124.00	MCW 10%M 90%W	0.61
60.00	SOSMCW 1%O 30%M 69%W	0.30
92.00	SOCM 2%O 98%M	0.94

* Recovery from multiple tests

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (MMcf/d)



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Orca Operating Co

12-25S-9W Reno

427 S Boston Ste 400
Tulsa, OK 74103

Shoffner 12-1

Job Ticket: 65876

DST#: 2

ATTN: Harold Watts

Test Start: 2019.06.16 @ 17:52:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

86000 ppm

Viscosity: 61.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.19 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: 0.02 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbbl
0.00	90 GIP	0.000
124.00	MCW 10%M 90%W	0.610
60.00	SOSMCW 1%O 30%M 69%W	0.300
92.00	SOCM 2%O 98%M	0.944

Total Length: 276.00 ft Total Volume: 1.854 bbl

Num Fluid Samples: 0

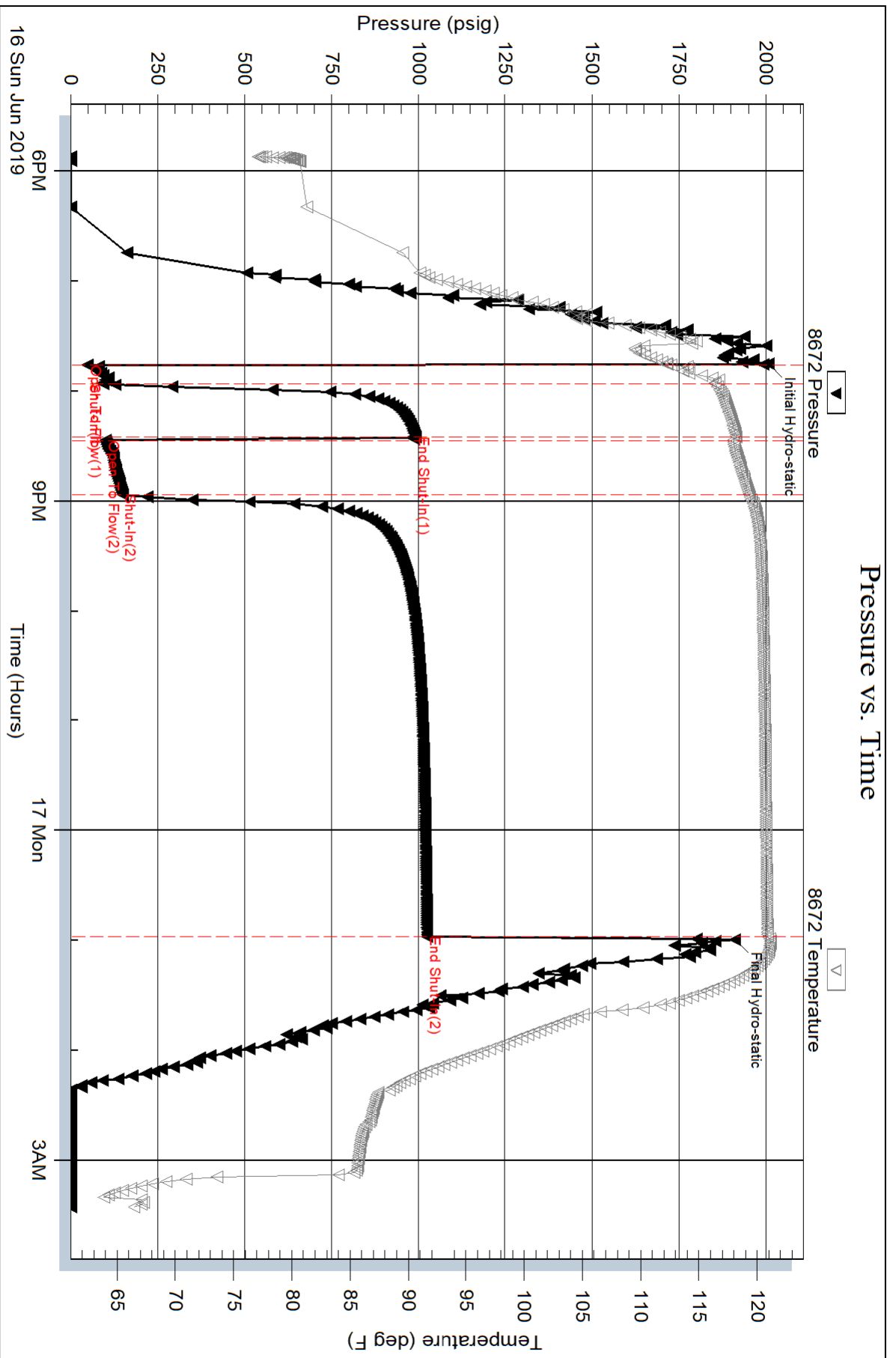
Num Gas Bombs: 0

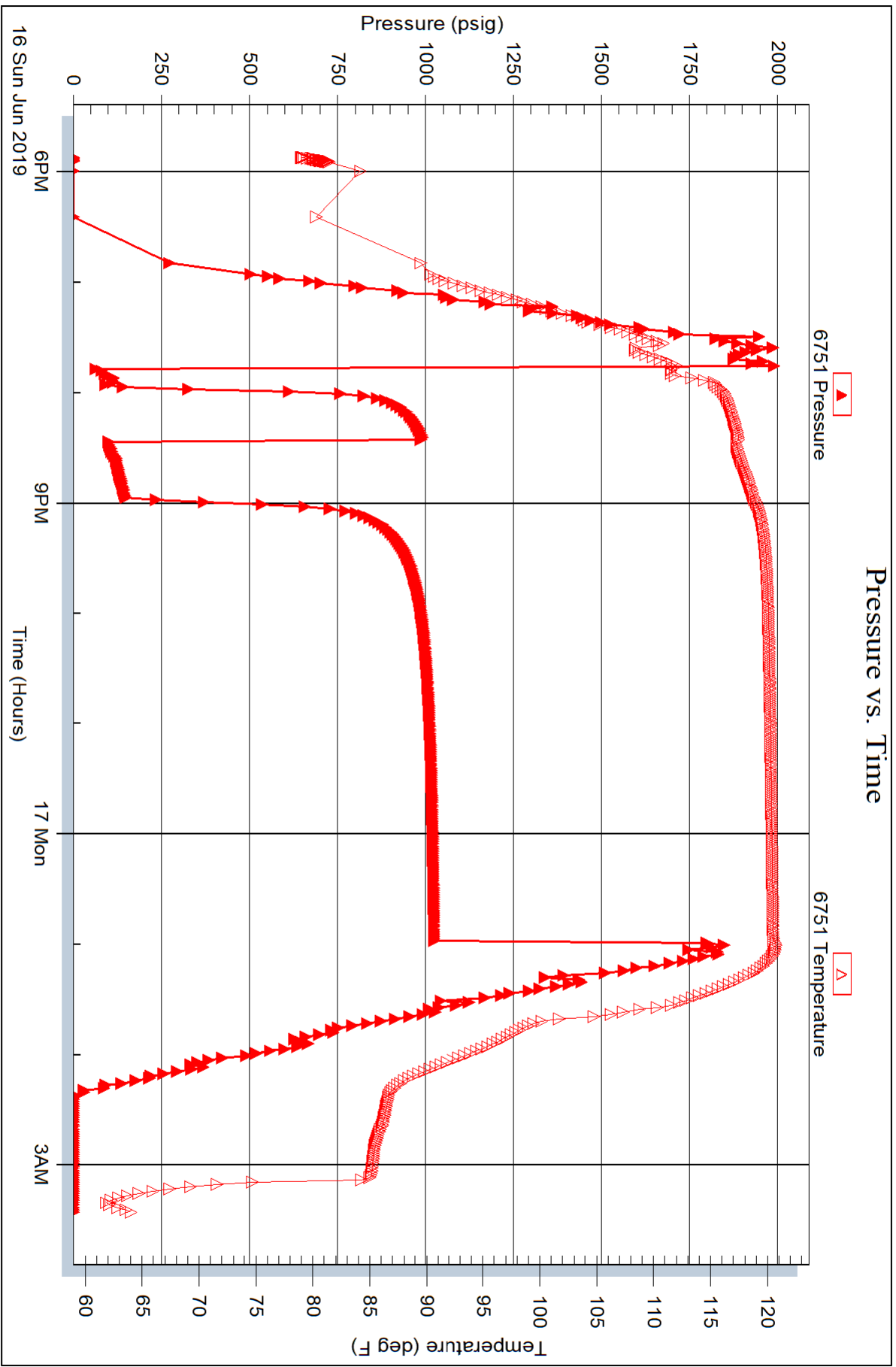
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW w as .084 @ 76 degrees





GEOLOGIC PROGNOSIS

Well: SCHOFFNER SWD NO. 12-1

API:

Date/time printed: 7/18/2019 10:03

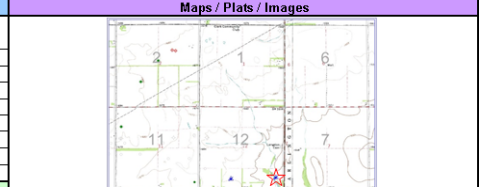


WELL SYNOPSIS
 Initial plan is to drill 5' into the top of the MSSP, stop to retrieve coring tool and core approximately 30'. Following the core, the wellbore will be drilled to its final depth in the Arbuckle. A Drill Stem Test will be performed over the cored MSSP interval to determine the zone's depletion, if any. Upon successful DST results showing sufficient bottom hole pressure we will continue operations with a wireline logging run to capture the MSSP reservoir. The information provided by these tests will dictate the drilling of an extended horizontal well (Kelly 12-1-1H) and this well will serve as the disposal well for the water.

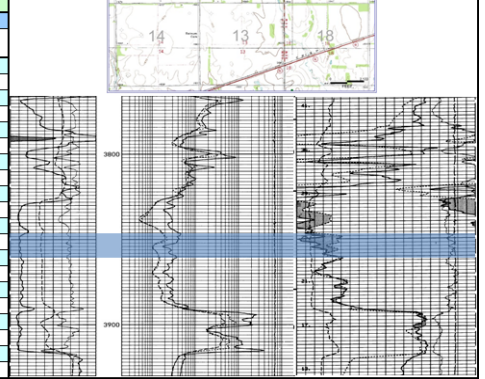
CONTACT INFORMATION				
Position	Name	Office #	Mobile #	E-Mail
Primary Geologist	JOE PODBECHAN	(918) 582-4284	(918) 261-7744	jpodpechan@orcaoperating.com
1st Alt. Geologist	JASON ANDREWS	(918) 582-4284	(918) 605-0114	jandrews@orcaoperating.com
2nd Alt. Geologist	BRAD NICHOLS	(918) 582-4284	(918) 704-7311	bnichols@orcaoperating.com
Drilling Supervisor:				
Drig. Engineer	WAYNE TAYLOR	(918) 582-4284	(918) 726-1801	waynetaylor@exactengineering.com
Alt. Drig. Engineer				
Rig Supervisor				
Alt. Rig Supervisor				
Drilling Contractor				
Mud Logging				
LWD				
Wireline				

WELL DATA		LOCATION DATA	
State :	Kansas	SHL	
County :	Reno	S-T-R :	12-25S-9W
Prospect :	Pleasant Valley	Lat :	37.88510182
Well Type :	SWD	Long :	-98.25344272
GL :	1644	X :	2071256
KB :	1656	Y :	443738.17
TD (MD) :	4,700	Sec Calls:	380' FEL
TD (TVD) :	4,700		775' FSL
Target Formation			
ARBUCKLE			
Surf csg	800 TVD	S-T-R :	12-25S-9W
Int csg	TVD	Lat :	
KOP	TVD	Long :	
TARGET	TVD	X :	
TD	MD	Y :	
Est BHT	deg F	Sec Calls:	380' FEL
Est BHP	0 psi		775' FSL

RIG & DRILLING DATA		SERVICES		CONTROL WELLS	
Rig :		Wireline		Name :	BAINUM BROOKS-JOHNSON
Rig KB (ft) :	12 verify	From :	MIN REGD. To : TD	Operator :	RAMA GRIGGS
Pad :		Run 1 :	TRIPLE-COMBO	S-T-R :	12-25S-9W 13-25S-9W
VS (ft) :	BHL-SHL	Core		Lat :	37.8848114 37.8811549
Lateral (ft) :	BHL-POP	From :	3815 To : 3845	Long :	-98.263442 -98.256594
Inclination :	degrees	DST		County :	RENO
Azimuth :	degrees	From :	3815 To : 3845	KB :	1666 1652
Tolerances :	Vertical	Mudlogger		N/S Foot. :	4620 FSL
	Horizontal	From :	3000 To : TD	EW Foot. :	2310 FEL



Formation Top	TOPS			DRILLED TOPS		LITHOLOGY	DRILLING HAZARDS	Expected Mudweight (PPG)	OFFSET WELL DATA		
	TVD	SSTVD	Vertical Section	TVD	SSTVD				TVD	SSTVD	MW
HEEBNER	3,111	-1,455		3094	-1438				3,121	-1,455	
DOUGLAS SHALE	3,140	-1,484		3160	-1504				3,150	-1,484	
LANSING	3,314	-1,658		3305	-1649				3,324	-1,658	
KANSAS CITY	3,681	-2,025		3682	-2026				3,691	-2,025	
CHEROKEE	3,784	-2,128		3693	-2037				3,794	-2,128	
MSSP LIME	3,817	-2,161		3837	-2181				3,827	-2,161	
MSSP BLUE	3,836	-2,180		3840	-2184				3,846	-2,180	
KINDERHOOK	3,905	-2,249		3912	-2256				3,915	-2,249	
VIOLA	4,120	-2,464		4085	-2429				4,130	-2,464	
ARBUCKLE	4,268	-2,612		4276	-2620				4,276	-2,612	



Prog Completed By : BRAD NICHOLS
 Date : 11/26/2018
 Edited by : BRAD NICHOLS
 Date : 1/11/2019

Company: ORCA Operating
Shoffner SWD 12-

Date: 7/22/2019

Well: 1

Files: SL 12558

Location: 775 FS 380 FE

CL 57181-
20192229

0

STIM-LAB
FULL CORE ANALYSIS

Sample Number	Top Depth (ft)	Bottom Depth (ft)	Description
1	3846	3847	Brec, tripolite cht, sl frac
2	3847	3848	Brec, tripolite cht, frac, tr cly
3	3848	3849	Brec, tripolite cht, frac
4	3849	3850	Brec, tripolite cht, frac, tr cly
5	3850	3851	Brec, tripolite cht, frac, tr cly
6	3852	3852	Brec, tripolite cht, frac
7	3852	3853	Brec, tripolite cht, frac, tr cly
8	3853	3854	Brec, tripolite cht, frac, tr cly
9	3868	3869	Brec, cht, silica-cly, sl frac
10	3871	3872	Brec, cht, silica-cly, sl frac



**Scale 1:240 (5"=100') Imperial
Measured Depth Log**

Well Name: SHOFFNER SWD 12-1 **ORCA OPERATING COMPANY LLC**
API: 15-155-21761
Location: SEC: 12 -25S-09W SW NE SE SE **RENO CO., KS**
License Number: 23996-0 **Region:** W ARLINGTON
Spud Date: 06/10/2019 **Drilling Completed:** 06/17/2019
Surface Coordinates: 775' FSL & 380' FEL, SW NE SE SE OF
SEC. 12-25S-09W RENO CO., KS
Bottom Hole REPORT FOR: ORCA OPERATING COMPANY LLC
Coordinates: **LOGGER:** LEVI CAMPBELL
Ground Elevation (ft): 1644' **K.B. Elevation (ft):** 1656'
Logged Interval (ft): 1676' **To:** 4326' **Total Depth (ft):** 4326'
Formation: ARBUCKLE
Type of Drilling Fluid: LSND

Printed by MudLog from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

Company: ORCA OPERATING COMPANY LLC
Address: 427 S. BOSTON, STE 400
TULSA, OK 74103

GEOLOGIST

Name: MR. JASON ANDREWS
Company: ORCA OPERATING COMPANY LLC
Address: 427 S. BOSTON, STE 400
TULSA, OK 74103

CORE

Contractor: DEBBISS CORING
Core #: 1
Formation: MISSISSIPPI
Core Interval: From: 3845' Cut: 30'
To: 3875' Recovered: 30'
Bit type: SHORT :: CZ410 :: E240
Size: 8.75"
Coring Time: 3 hrs

DSTs

CONTRACTOR: TRILOBITE TESTING, IJNC.
TESTER: LEAL CASON
UNIT: 74

DST #1
FAILED

DST #2
3837' - 3875'

1ST OPEN: FAIR BLOW, BUILT TO 7.5"
NO BLOW BACK ON SHUT IN #1

2ND OPEN: FAIR BLOW, BOB IN 20 MINS, BUILT TO 17.5", NO BLOW BACK ON SHUT IN #2

ISIP 991.26# :: FSIP 1023.99#
IFP 48.68 - 94.08# :: FFP 100.56 - 148.87#
HP 1911.08 - 2007.9#

RECOVERED:
92' SOSCM 2% OIL 98% WATER
60' SOSMCW 1% OIL 30% MUD 69% WATER
124' MCW 10% MUD 90% WATER

Well Information

DRILLING CONTRACTOR: DUKE DRILLING RIG 9
CORING CONTRACTOR: DEVEBLISS CORING
DST CONTRACTOR: TRILOBITE TESTING
MUD LOGGING: XGP
LOGGERS: LEVI CAMPBELL
 levi.campbell@xgpmudlogging.com (405) 397-5932
 TRAILER: V1 BH: 5598 HASP: 2 COMP: HP11

ROCK TYPES

	Calc cmtd dolo		Igne		Till		Trip chrt
	Chrt_gnr		Lmst		Sandylms		Spic chrt
	Lmysltst		Mrlst		Hotsh		Dolc chrt
	Bent		Shale		Sltst		Dk chrt
	Brec		Shale		Dolc ss		Chrt
	Clyst		Shcol		Lmysnd		Calc chrt
	Coal		Sltys		Calc dolo		
	Congl		Shgy		Dolomtc lm		
	Dol		Ss		Dolo cmtd lm		

ACCESSORIES

FOSSIL		Pisolite		Marl		Mrst
		Plant		Minxl		Ssstrg
		Strom		Phos		Sltstrg
		Crin		Pyr		
	MINERAL			Silt	TEXTURE	
		Arggrn		Sil		Chalky
		Arg		Calc		Cryxln
		Bent		Sand		Earthy
		Bit		Dol		Finexln
		Brecfrag		Sidrte		Grainst
		Carb		Glauc		Lithogr
		Chtdk	STRINGER			Microxln
		Chtlt		Arg		Mudst
		Feldspar		Bent		Packst
		Qtz		Coal		Wackest
		Hvymin		Dol		
		Kaol		Ls		

OTHER SYMBOLS

POROSITY

- E Earthy
- F Fenest
- F Fracture
- X Inter
- M Moldic

- Organic
- P Pinpoint
- V Vuggy

- OIL SHOW
- Even

- Spotted
- Ques
- Dead

- INTERVAL
- Core

- Dst

EVENT

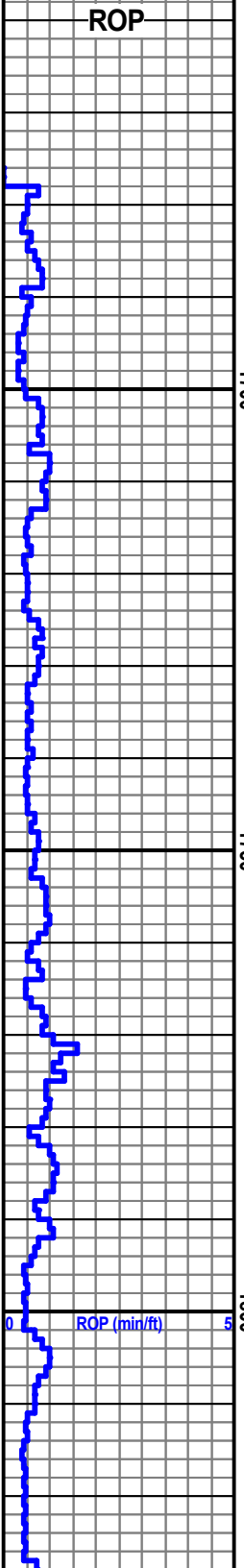
- Rft
- Sidewall

Survey	Curve Track 1 ROP (min/ft) ——	MD	Percentage Lithology	Lithology	FLOR	CUT	Geological Descriptions	TG, C1-C5		
					0% 10% 20% 30% 40%	GD FR PR		TG (Units) —— C1 (units) —— C2 (units) —— C3 (units) —— iC4 (units) —— nC4 (units) —— iC-5 ——		
06/13/2019	0	5	50				<div style="background-color: black; color: white; padding: 5px; text-align: center;"> <h2 style="margin: 0;">ORCA</h2> <p style="margin: 0;">Resources, L.L.C.</p> </div> <p style="text-align: center; margin-top: 10px;"> ORCA OPERATING COMPANY SHOFFNER SWD 12-1 SEC. 12-25S-09W RENO CO, KS GL: 1644' KB: 1656' </p>	-20	ORCA OPERATING :: SHOFFNER SWD 12-1	180
	0	5	1600				<p>SHL: 775' FSL & 380' FELOF SW NE SE SE OF SEC. 12-25S-09W RENO CO., KS</p> <p style="text-align: center; margin-top: 20px;">SPUD ON: 06/10/2019</p> <p style="text-align: center; margin-top: 20px;">SET 9 5/8" CASING @ 1670'</p> <p style="text-align: center; margin-top: 20px;">DRILLING W/BIT #2 :: 8.75" :: JZ :: PL516 :: S09028 :: JETS 5X 14'S :: IN @ 1676'</p>	-20	ORCA OPERATING :: SHOFFNER SWD 12-1	180
			1650				<p style="text-align: center; margin-top: 20px;">DRILLING W/FRESH WATER</p>			

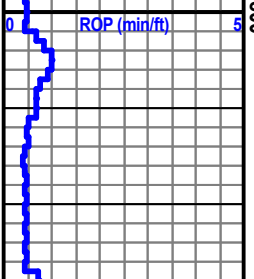
SURVEYS

ROP

WOB-20K
RPM-95
PP-957
SPM-106



WOB-20.5K
RPM-95
PP-957
SPM-106



1700

1750

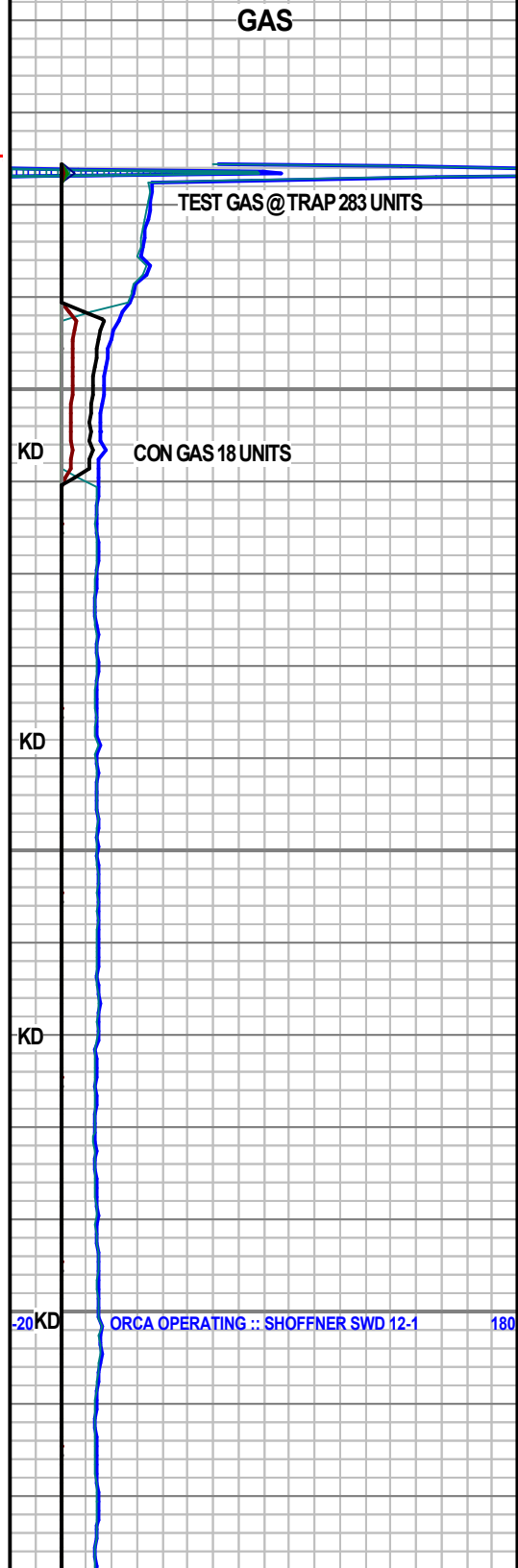
1800

ROP (min/ft)

**BEGIN LOGGING @ 1676' ON
06/13/2019**



GAS



KD

KD

KD

20KD

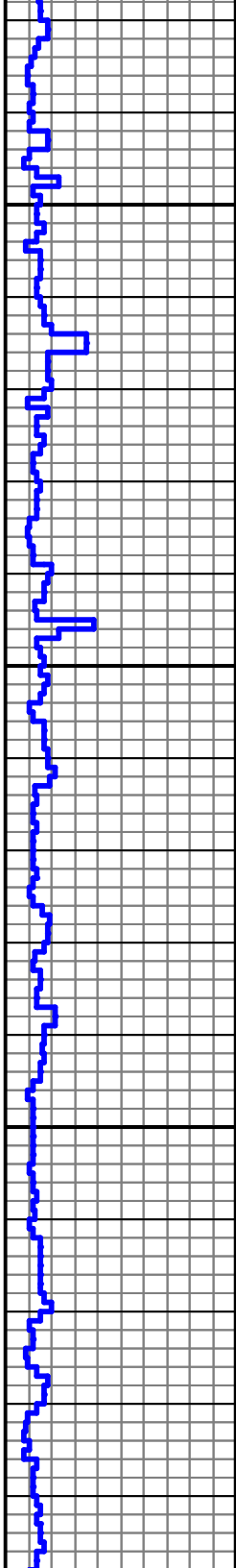
TEST GAS @ TRAP 283 UNITS

CON GAS 18 UNITS

ORCA OPERATING :: SHOFFNER SWD 12-1

180

WOB-21.9K
RPM-92
PP-1037
SPM-101



1850

1900

1950

KD

KD

KD

CON GAS 19 UNITS

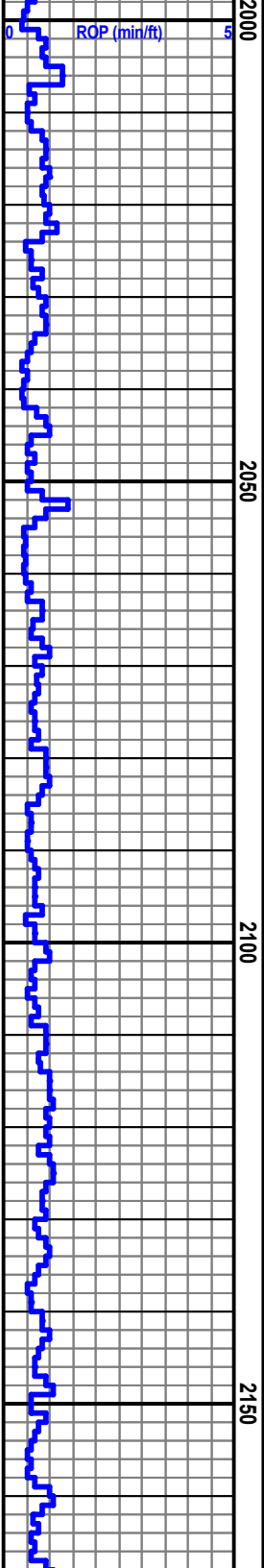
KD

KD

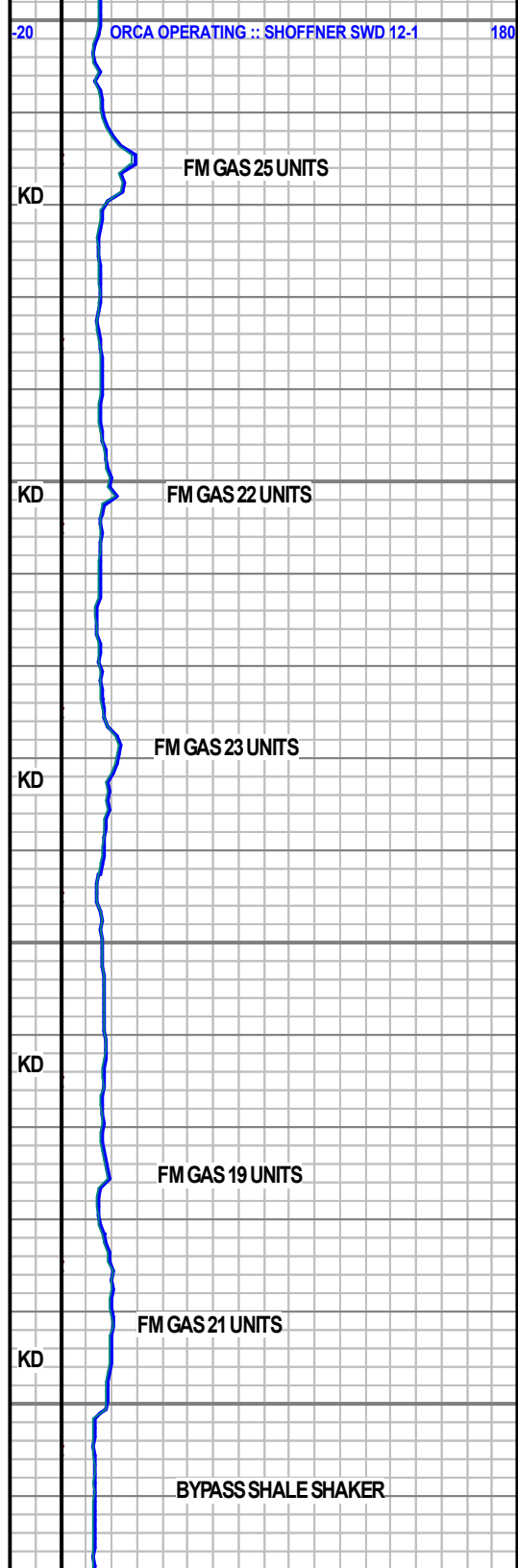
FM GAS 18 UNITS

KD

WOB-21.5K
RPM-94
PP-1138
SPM-105



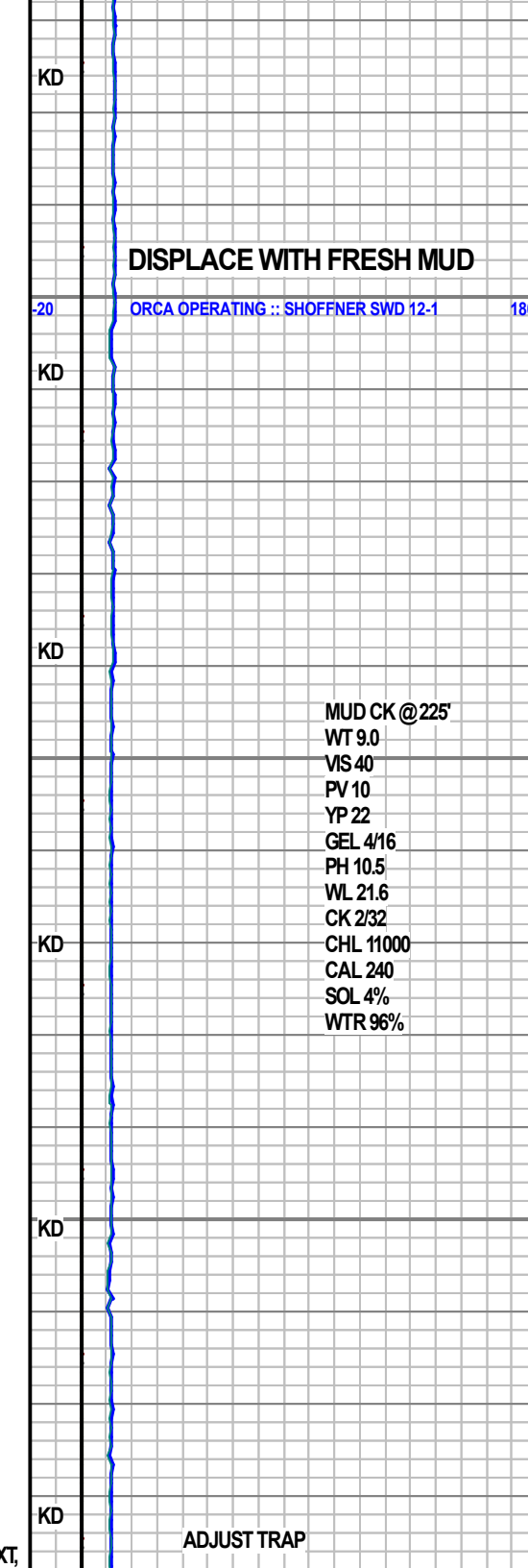
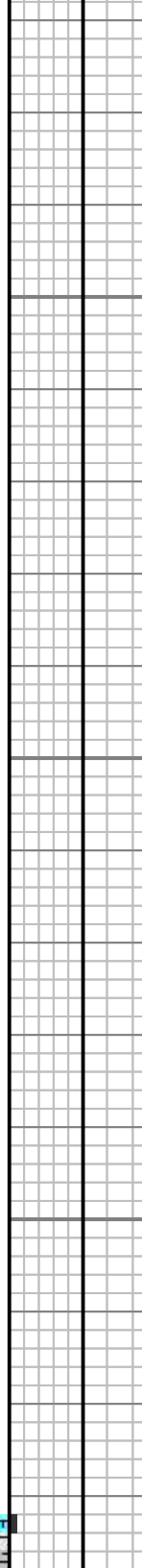
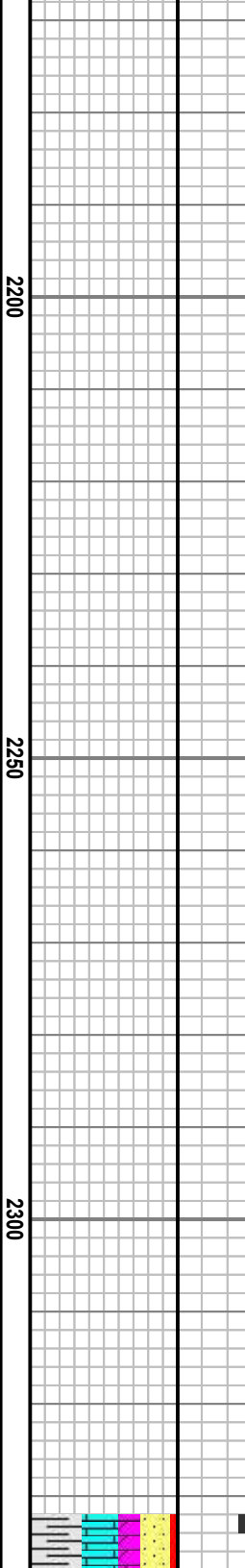
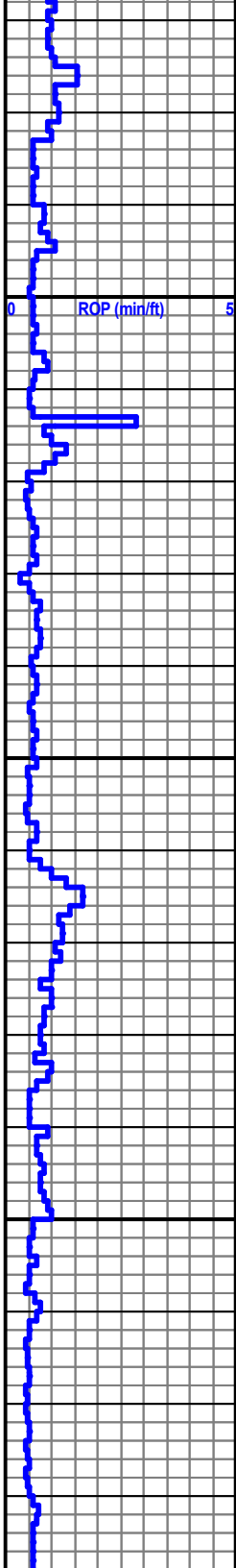
WOB-19.8K
RPM-90
PP-1053
SPM-102



06/14/2019

WOB- 19.9K
RPM- 93
PP- 1142
SPM-100

DEV. SURVEY @
2301'
DEV. 0.5°



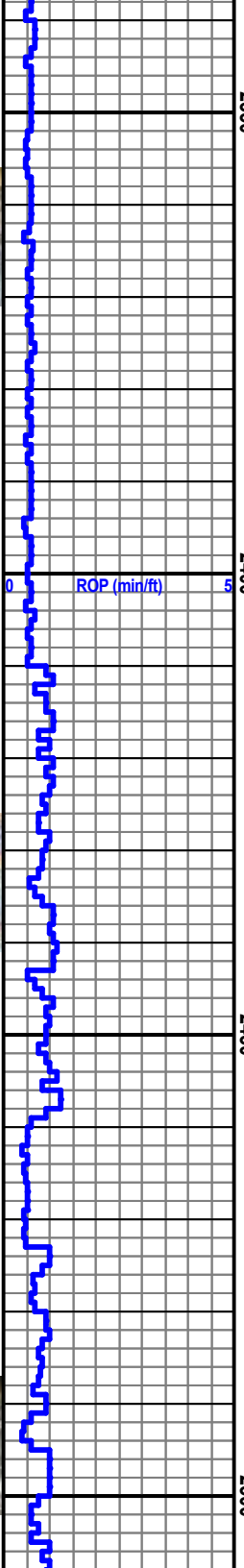
SH: LT GY TO GY, OCC DK GY, TR ORGSH/BRN, OCC
TANSH, MOD SFT, SCAT MOD FRM, V/FN TO SLTY TXT,

ADJUST TRAP



2368'

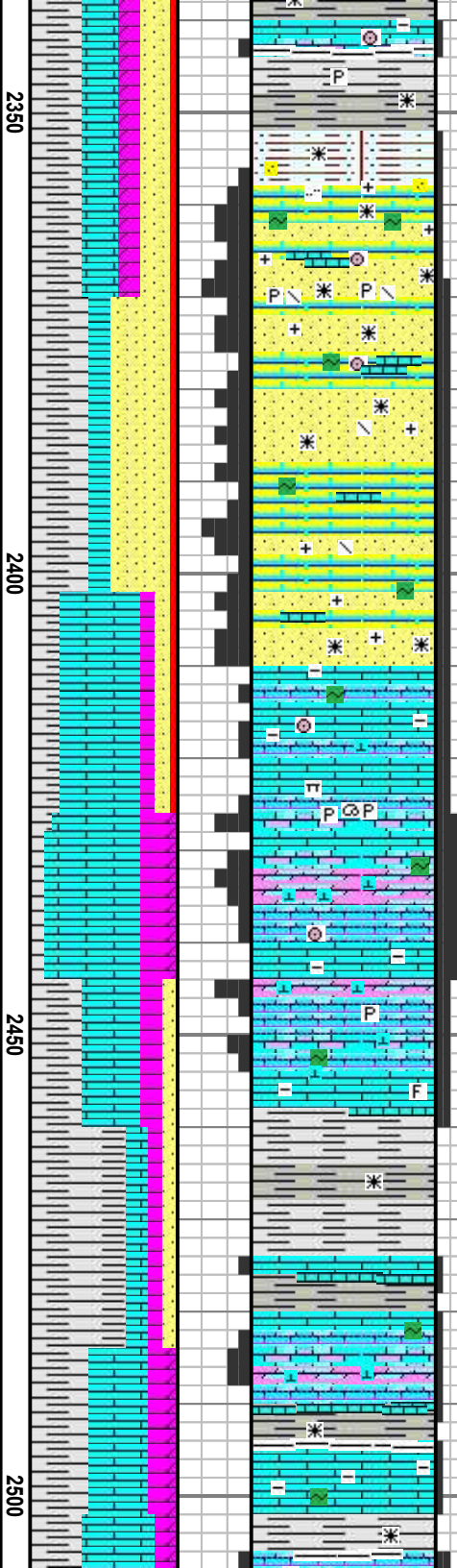
WOB-19.5K
RPM-91
PP-1262
SPM-104



2444'



2502'



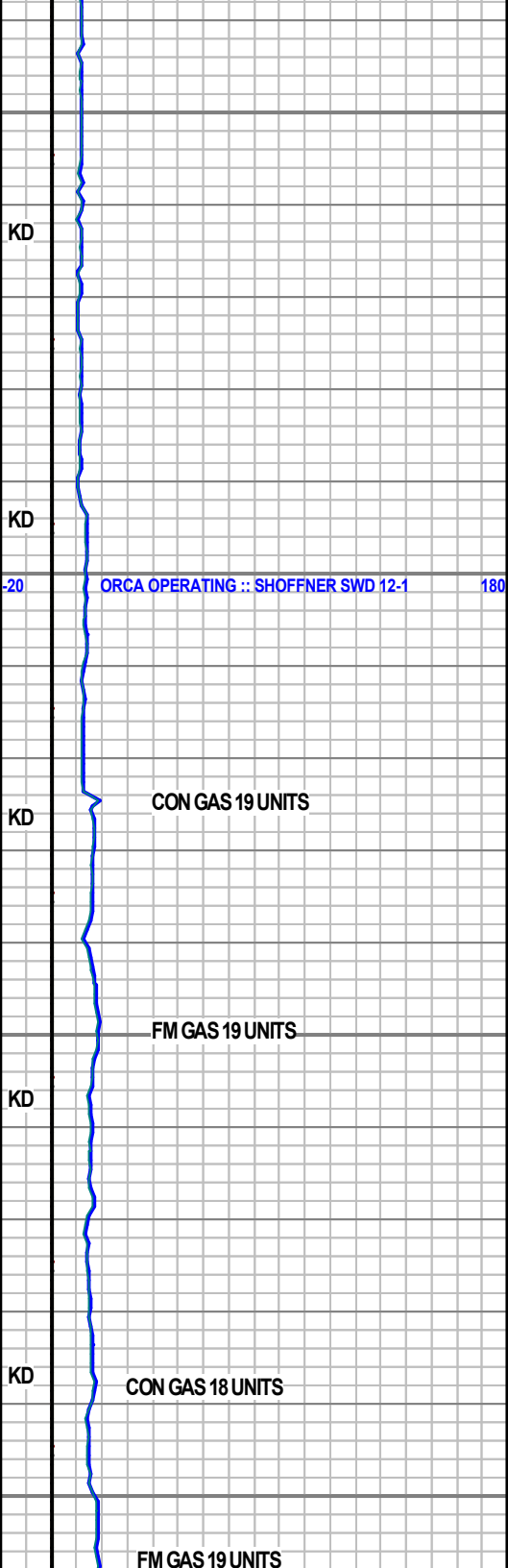
DULL LSTR, PLTY, TR CHNKY, NON CALC, SM SLTY IP,
TR SLTST W/OCC AREN, TR MICS, TR PYRC, OCC
DULL YEL TO YEL FLOR, NO VIS CUT

SS: OFF WHT TO WHT, SCAT LT TO VLT GYSH, OCC
OPQ TO TRNSL, MOD FRM, OCC FRM, CRMBLY, FN L
TO FN U GRNS, OCC MED L GRNS, SUB ANG GRNS,
WELL CONSL, MOD SRD, SCAT CALC CMT, TR WELL
IND, TR GLAUC, OCC FELDSPR, OCC INTST MICA, TR
WSPY GIL W/TR PYRC, TR LS INTCL W/OCC CRIN
FRAGS, NO ODOR, SCAT TO SM XGRNLR POR, TR
LAM SH: LT GY TO GY, OCC DK GY, TR ORGSH/BRN,
OCC TANSH, MOD SFT, SCAT MOD FRM, VFN TO SLTY
TXT, DULL LSTR, PLTY, TR CHNKY, NON CALC, SM
SLTY IP, TR SLTST W/OCC AREN, TR MICS, TR PYRC,
TR DULL YEL TO YEL FLOR, NO VIS CUT

LS: CRM TO DK CRM, SCAT BUFF, TR GYSH MOTT, TR
BRN TO DK TAN MOTT, OCC OFF WHT, FRM, SCAT
V/FRM, BRTL, MSTLY MICRO XLN, SCAT VFN XLN,
PLTY, SM BLKY, OCC CHNKY, SCAT ARG, SM DOLC
CMT, OCC MRLY IP, SCAT INTRBD DOLO, OCC LRG
ANHED CALCITE FL, OCC TO TR GLAUC, TR FOSS
FRAGS W/OCC PYRC GASTRO, OCC MIN PYR INC., NO
VIS STAIN, NO ODOR, TR MOLDC POR, SCAT FRAC
POR, OCC PP TO FN VUG POR, TR TO SCAT DULL YEL
TO DULL DK YEL FLOR, N OVIS CUT

SH: LT GY TO GY, OCC DK GY, TR ORGSH/BRN, OCC
TANSH, MOD SFT, SCAT MOD FRM, VFN TO SLTY TXT,
DULL LSTR, PLTY, TR CHNKY, NON CALC, SM SLTY IP,
TR SLTST W/OCC AREN, TR MICS, TR PYRC,

LS: CRM TO DK CRM, TR BUFF, OCC GYSH MOTT, TR
BRN TO DK TAN MOTT, OCC OFF WHT, FRM, SCAT
V/FRM, BRTL, MSTLY MICRO XLN, TR VFN XLN, PLTY,
SM BLKY, OCC CHNKY, SCAT ARG, SCAT DOLC
CMT, TR INTRBD DOLO, OCC LRG ANHED CALCITE
FL, OCC GLAUC, NO VIS STAIN, NO ODOR, SCAT
FRAC POR, OCC BR POR, SM LAM SH: LT GY TO GY



WOB-19.1k
RPM-89
PP-1258
SPM-104

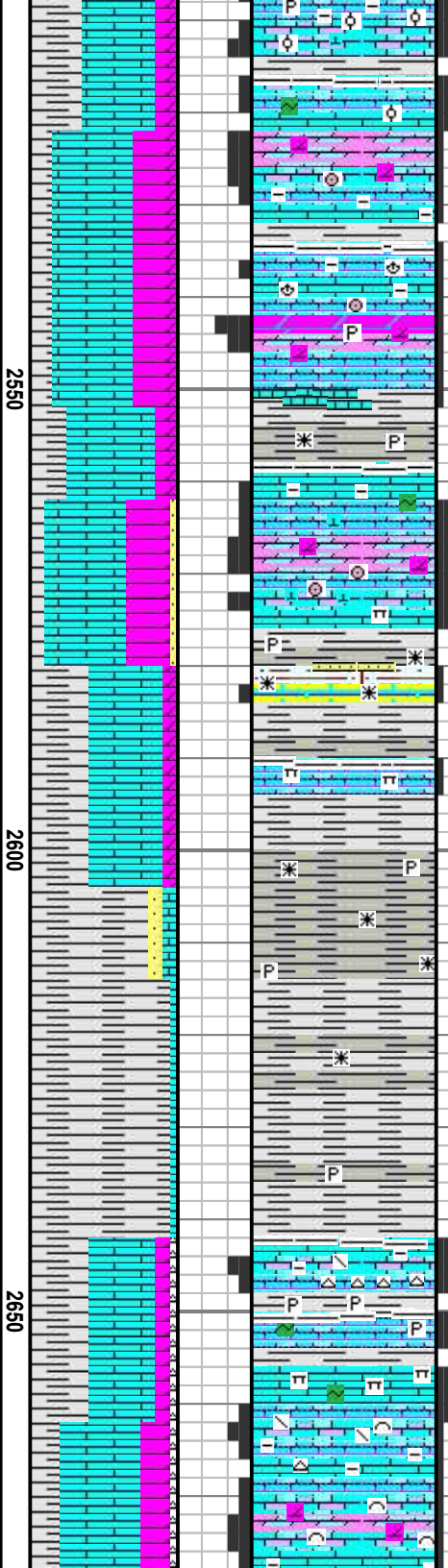
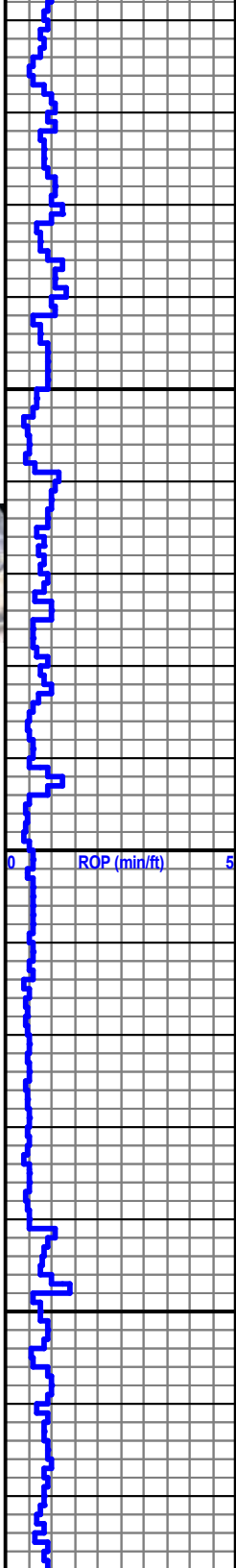
RIG REPAIR - WORK
ON MUD PUMP



2580'

WOB-16.4K
RPM-103
PP-1321
SPM-107

2700'

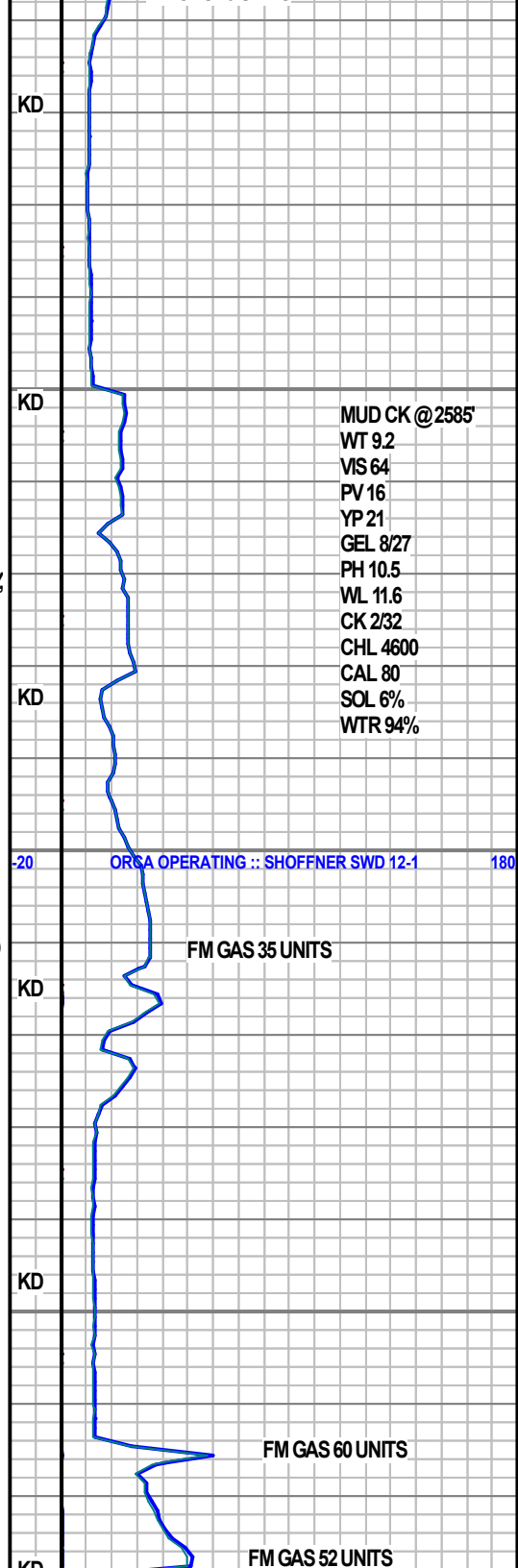


FRAC POR, OCC PP POR, SM LAM SH: LT GY TO GY,
OCC DK GY, MOD SFT TO MOD FRM, V/FN TO SLTY
TXT, DULL LSTR, PLTY, TR CHNKY, NON CALC, SM
SLTY IP, TR MICS, TR PYRC, OCC DULL TO V/DULL
YEL FLOR, NO VIS CUT

LS: DK CRM TO CRM, SCAT LT TO VLT TAN, TR LT
CRM, TR DK TAN TO BRN MOTT, TR TO OCC OFF
WHT, MOD FRM, TR V/FRM, MSTLY BRTL, MSTLY
MICRO XLN, TR TO SCAT V/FN XLN, OCC SLI SUC TXT,
PLTY TO BLKY, SCAT CHNKY, SCAT ARG, SM DOLO
CMT, SCAT TO SM INTRBD DOLO, TR LAM DOLO, TR
GLAUC, OCC ANHED CALCITE FL W/SM OCCLD POR,
TR TO OCC FN IMBDD DOLO RHOMBS, TR FOSS
FRAGS W/BRACH, OCC OOLTC, OCC MIN PYR INC.,
NO VIS STAIN, NO ODOR, TR MOLDC POR, TR XLN
POR, SCAT FN TO HAIRLINE FRAC, SM LAM SH: LT GY,
TR VLT GY, OCC GRNSH/GY, OCC TANSH, MOD SFT,
SM MOD FRM, SCAT BRTL, V/FN TO SLTYTXT, DULL
LSTR, NON CALC, SCAT MICRO MICA, OCC MIN PYR
INC., TR DULL YEL TO DULL DK YEL FLOR, NO VIS
CUT

SH: MED TO SCAT LT GY, TR DK GY, OCC VLT GY, MOD
FRM, SM BRTL, SMTH TO OCC V/FN TXT, DULL LSTR,
SM SUB WXY LSTR, PLTY, OCC CHNKY, NON CALC,
OCC MICRO MICA, OCC MIN PYR INC., OCC SLTY IP

LS: CRM TO DK CRM, SCAT BUFF, TR GYSH MOTT, TR
BRN TO DK TAN MOTT, OCC OFF WHT, OCC BLK,
MSTLY FRM, SCAT MOD FRM, BRTL, MICRO XLN, SM
V/FN XLN, TR TO OCC SLI SUC TXT, PLTY/BLKY, SCAT
CHNKY, SCAT TO SM ARG, SM DOLC CMT, OCC MRLY
IP, TR INTRBD DOLO, TR OPQ TO SMKY CRYPTO XLN
SHRP V/HRD CHRT NOD, OCC V/FN IMBD DOLO
RHOMBS, OCC GLAUC, TR BIOCLST W/FINE DOLC
MTX, OCC MIN PYR INC., OCC ASPHLTC STAIN, NO
ODOR, TR MOLDC POR, SCAT FRAC POR, OCC XLN
POR, OCC TO TR V/DULL DK YEL FLOR, OCC DULL
YEL FLOR, NO VIS CUT



MUD CK @2585'
WT 9.2
VIS 64
PV 16
YP 21
GEL 8/27
PH 10.5
WL 11.6
CK 2/32
CHL 4600
CAL 80
SOL 6%
WTR 94%

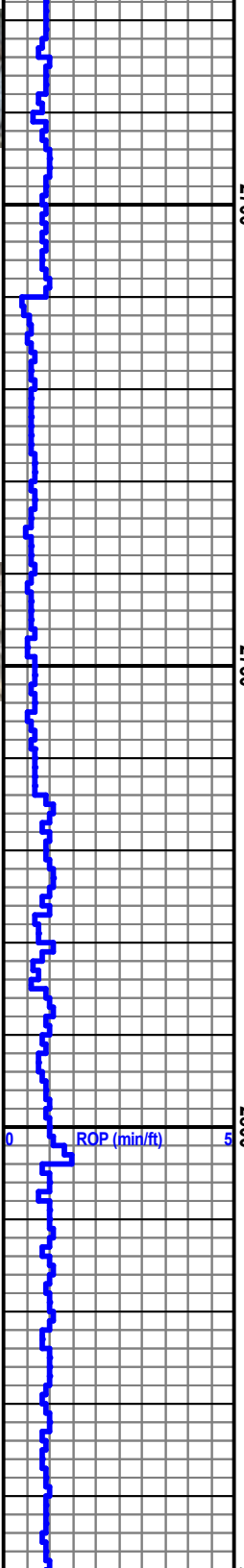


2760'



WOB- 21.3K
RPM- 96
PP- 1368
SPM-101

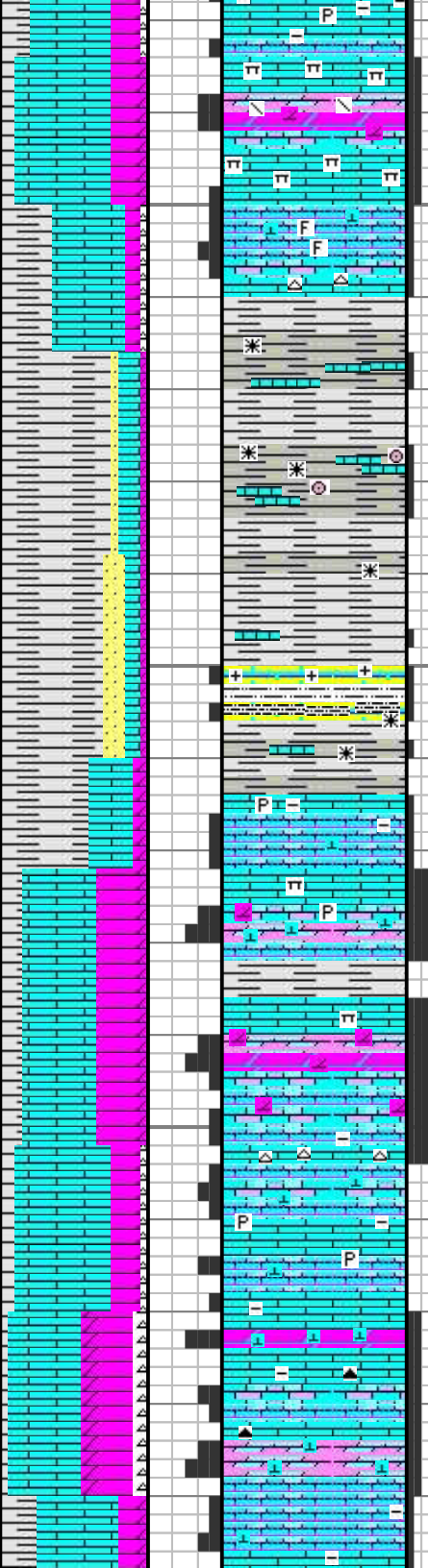
DEV. SURVEY @
2803'
DEV. 0.5°



2700

2750

2800

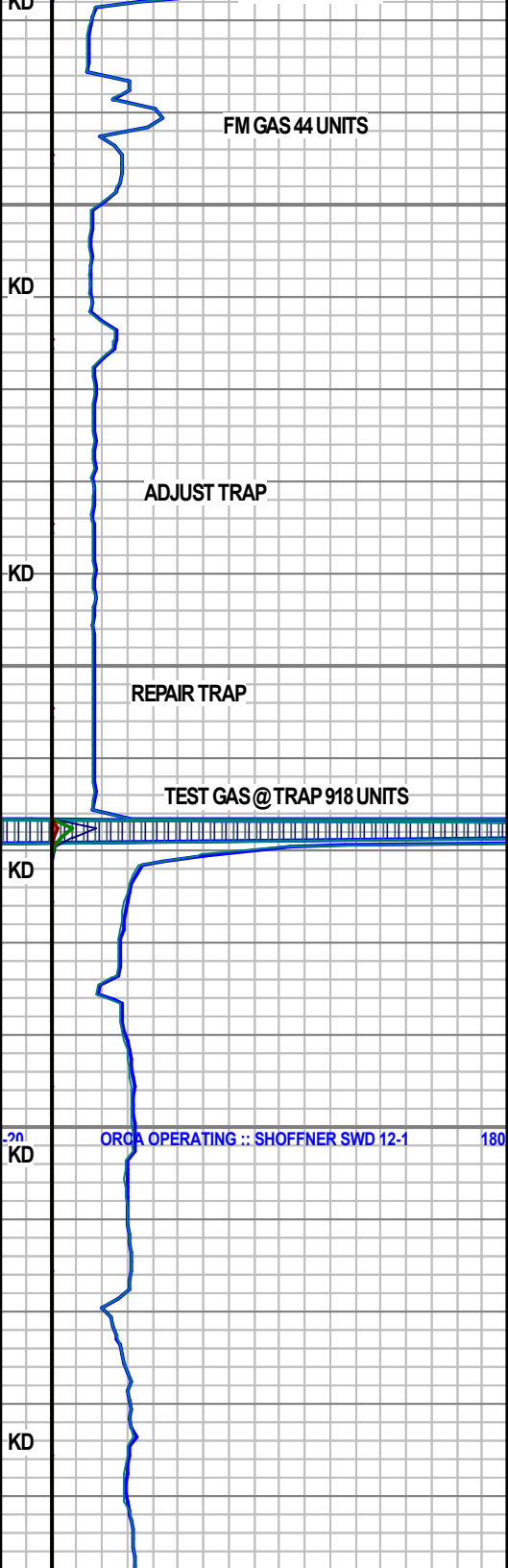


LS: CRM TO SM DK CRM, SCAT OFF WHT, TR VLT GYSH, OCC WHT, MOD FRM, SCAT FRM, MSTLY BRTL, OCC MSHY, SM VFN XLN, SCAT MICRO XLN, TR V/FN SUC TXT, BLKY, PLTY, OCC CHNKY, SCAT MRLY IP, DECRSE ARG, SM DOLC CMT, TR TO SCAT INTBD DOLO, OCC OPQ TO SMKY CRYPTO XLN V/HRD CHRT NOD, TR FN IMBD DOLO RHOMBS, OCC FOSS FRAGS, TR TO SCAT HAIRLINE FRAC, OCC XLN POR, OCC MLDC POR, OCC TO TR V/DULL DK YEL FLOR, OCC DULL YEL FLOR, NO VIS CUT

SH: LT GY TO GY, SCAT TO SM VLT GY, TR DK GY, MOD FRM, TR MOD SFT, MSTLY BRTL, V/FN TO FN TXT, PLTY, OCC CHNKY, NON CALC, SM SLTY IP, TR SLTST W/OCC SNDY IP, TR MICS, TR MICRO MICA, OCC LENTC FN U TO TR MED LANG GRNS WELL CONSL FR SRTD CALC SCAT FELDSPR SS W/TR MICS, OCC INTRBD LS: CRM TO DK CRM, TR BUFF, OCC GYSH MOTT, TR BRN MOTT, SCAT V/FRM, BRTL, MSTLY MICRO XLN, TR V/FN XLN, PLTY, SCAT ARG, SCAT DOLC CMT, TR CRIN FRAGS, NO VIS STAIN, NO ODOR, SCAT FRAC POR, OCC MLDC POR, OCC DULL YEL FLOR, N OVMS CUT

LS: LT TO VLT CRM, TR OFF WHT, SCAT CRM, OCC TAN TO DK TAN MOTT/STRKS, FRM, SCAT MOD FRM, MSTLY BRTL, TR TO SCAT CRMBLY, V/FN XLN, SCAT MICRO XLN, OCC FN XLN, PLTY TO BLKY, TR CHNKY, TR ARG, TR MRLY IP, SM DOLC CMT, SCAT TO SM INTRBD DOLO, TR ANHED OPQ TO TANSY CALCITE FL W/OCC FRAC, OCC LRG CHNKY DRYSY CALCITE, OCC V/FN IMDD DOLO RHOMBS, OCC PYRC, OCC OPQ TO SMKY SHRPANG CYRPTO XLN CHRT, OCC ASPHLTC SPOT STAIN ALONG FRAC, NO ODOR, SM FN FRAC, TR HAIRLINE FRAC, OCC XLN POR, SCAT DULL YEL FLOR, TR DULL DK YEL FLOR, NO VIS CUT

LS: CRM TO DK CRM, TR BUFF, OCC GYSH MOTT, OCC DK TAN MOTT, FRM, SCA MOD FRM, BRTL, MSTLY MICRO XLN, SM V/FN XLN, PLTY, SM BLKY, OCC CHNKY, SCAT ARG, DECRSE DOLC CMT, TR INTRBD DOLO, OCC LRG ANHED CALCITE FL, OCC



FM GAS 44 UNITS

ADJUST TRAP

REPAIR TRAP

TEST GAS @ TRAP 918 UNITS

ORCA OPERATING :: SHOFFNER SWD 12-1

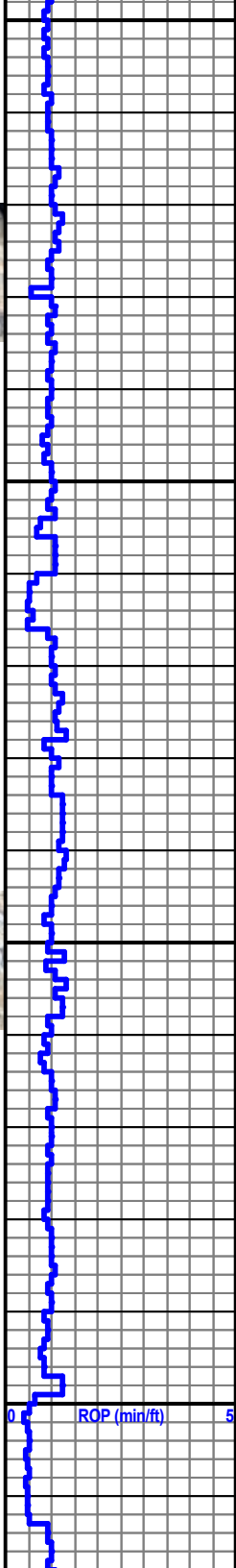
180

2840'

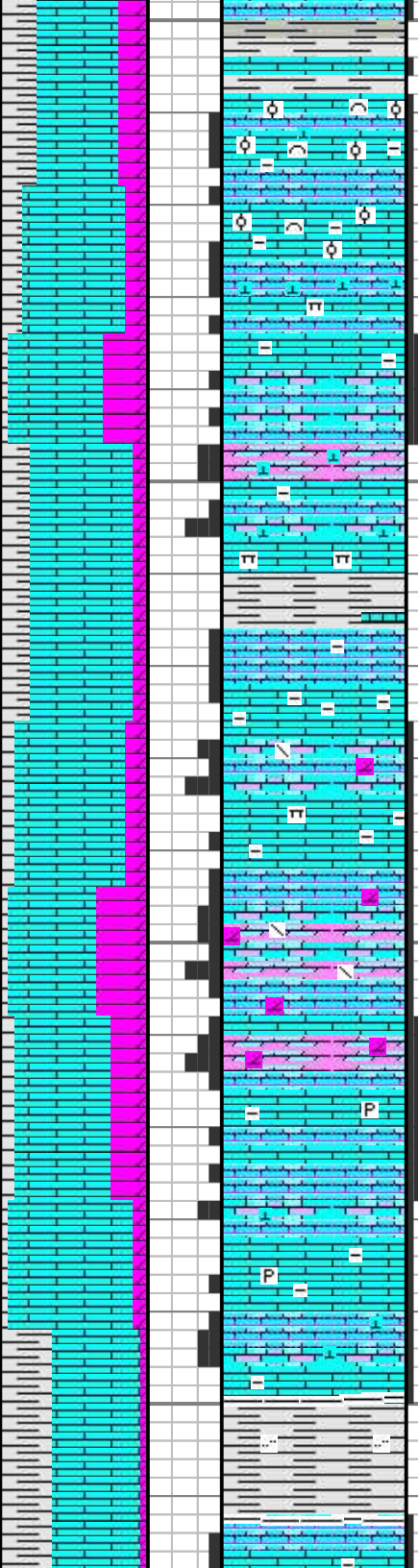
WOB-22.8K
RPM-93
PP-1417
SPM-108

2958'

WOB-22.5K
RPM-95
PP-1280
SPM-101



2850
2900
2950
3000

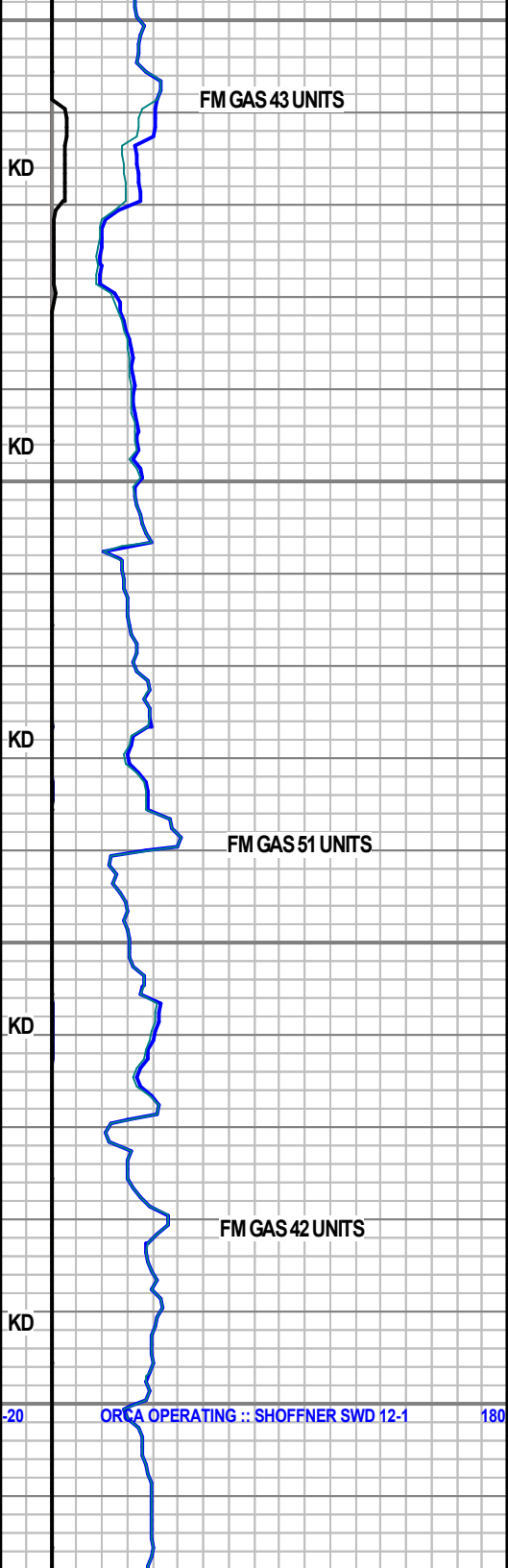


DK GY SHRP ANG CHRT, OCC OOIBIOCLST, NO VIS STAIN, NO ODOR, SCAT FRAC POR, OCC PP POR, SM LAM SH: LT GY TO GY, OCC DK GY, MOD SFT TO MOD FRM, V/FN TO SLTY TXT, DULL LSTR, PLTY, TR CHNKY, NON CALC, TR SLTY IP, TR PYRC, OCC DULL TO V/DULL YEL FLOR, NO VIS CUT

LS: CRM TO DK CRM, TR BUFF, OCC GYSH MOTT, OCC DK TAN MOTT, FRM, SCA MOD FRM, BRTL, MSTLY MICRO XLN, SM V/FN XLN, PLTY, SM BLKY, OCC CHNKY, SCAT ARG, SM DOLC CMT, TR INTRBD DOLO, OCC ANHED CALCITE FL, NO VIS STAIN, NO ODOR, SCAT FRAC POR, OCC PP POR, SM LAM SH: LT GY TO GY, OCC DK GY, MOD SFT TO MOD FRM, V/FN TO SLTY TXT, DULL LSTR, PLTY, TR CHNKY, NON CALC, TR SLTY IP, TR PYRC, OCC TO TR DULL YEL FLOR W/TR DK DULL YEL, NO VIS CUT

LS: DK TAN TO BRN, TR DK BRN, SM TAN TO DK CRM, SCAT LT CRM, OCC OFF WHT, FRM, SCAT MOD FRM, MSTLY BRTL, MSTLY MICRO XLN, SM V/FN XLN, OCC FN XLN, TR SLI SUC TXT, PLTY, SM BLKY, TR CHNKY, TR TO OCC ARG, OCC MRLYIP, SM TO SCAT DOLO CMT, SCAT INTRBD DOLO, TR V/FN IMBDD DOLO RHOMBS, OCC ASPHLTC STAIN ALONG FRAC, NO ODOR, SCAT FRAC POR, TR TO SCAT HAIRLINE FRAC, OCC XLN POR, OCC DULL YEL FLOR, NO VIS CUT

LS: OFF WHT TO VLT CRM, SM GY TO LT GYSH, OCC DK CRM, OCC WHT, MOD FRM, SM FRM, BRTL, MICRO XLN, TR V/FN XLN, PLTY, OCC BLKY, TR TO OCC ARG, SM DOLO CMT, OCC INTRBD DOLO, OCC CALCITE FL, OCC MIN PYR INC., NO VIS STAIN, NO ODOR, SM FRAC POR W/MSTLY HAIRLINE, TR LAM SH: LT GY TO GY, OCC DK GY, MOD SFT TO MOD FRM, V/FN TO SLTY TXT, DULL LSTR, PLTY, TR CHNKY, NON CALC, TR SLTY IP, TR PYRC, OCC DULL YEL FLOR, NO VIS CUT





3070'

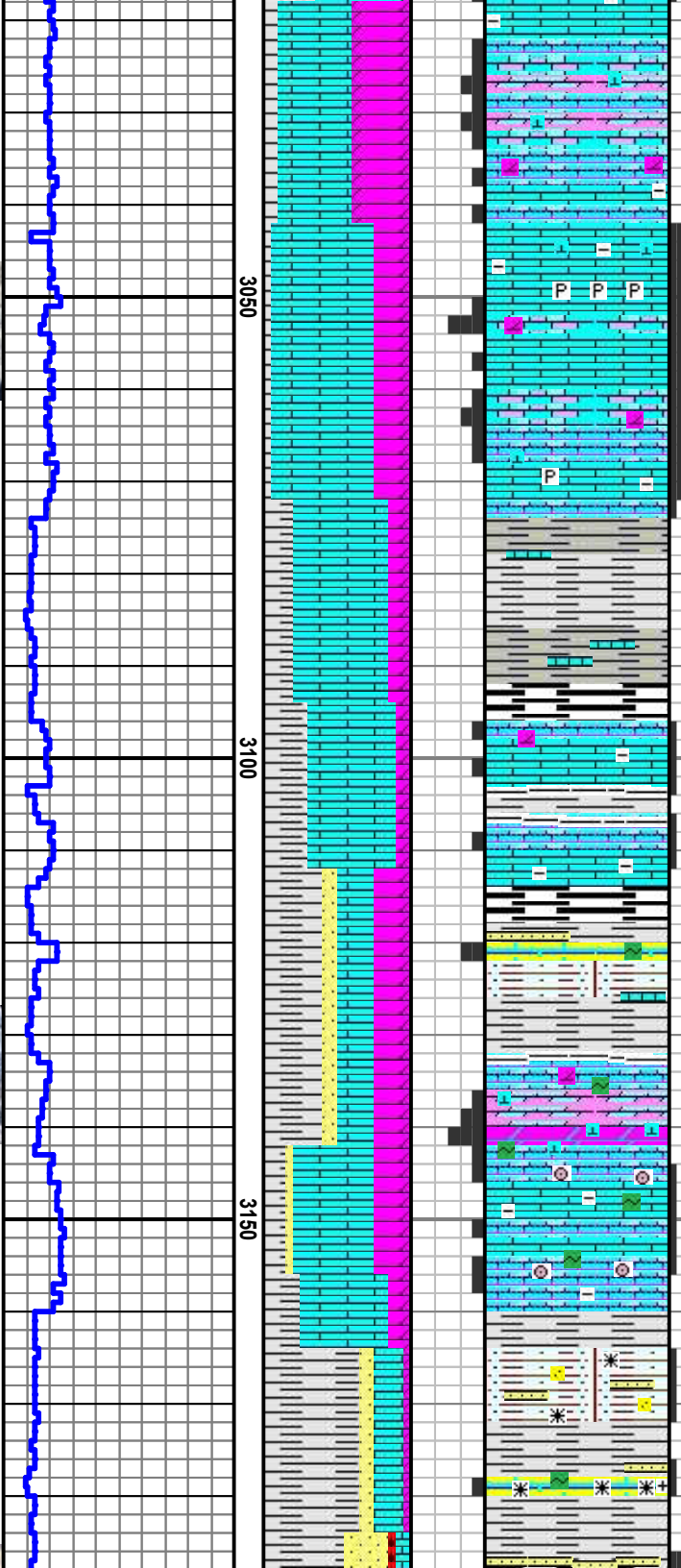
WOB-22K
RPM-96
PP-1352
SPM-105



3142'



3204'



LS: LT TO V/LT CRM, TR OFF WHT, SCAT CRM, OCC TAN TO DK TAN MOTT/STRKS, FRM, SCAT MOD FRM, MSTLY BRTL, TR TO SCAT CRMBLY, V/FN XLN, SCAT MICRO XLN, OCC FN XLN, PLTY TO BLKY, TR CHNKY, TR ARG, TR MRLY IP, SM DOLC CMT, SCAT INTRBD DOLO, TR ANHED OPQ TO TANSH CALCITE FL W/OCC FRAC, OCC V/FN IMDD DOLO RHOMBS, OCC EUHED DRSY PYR, NO VIS STAIN, NO ODOR, SM FN FRAC, TR HAIRLINE FRAC, OCC XLN POR, OCC DULL YEL FLOR, NO VIS CUT

HEEBNER @ 3093'

(-1438')



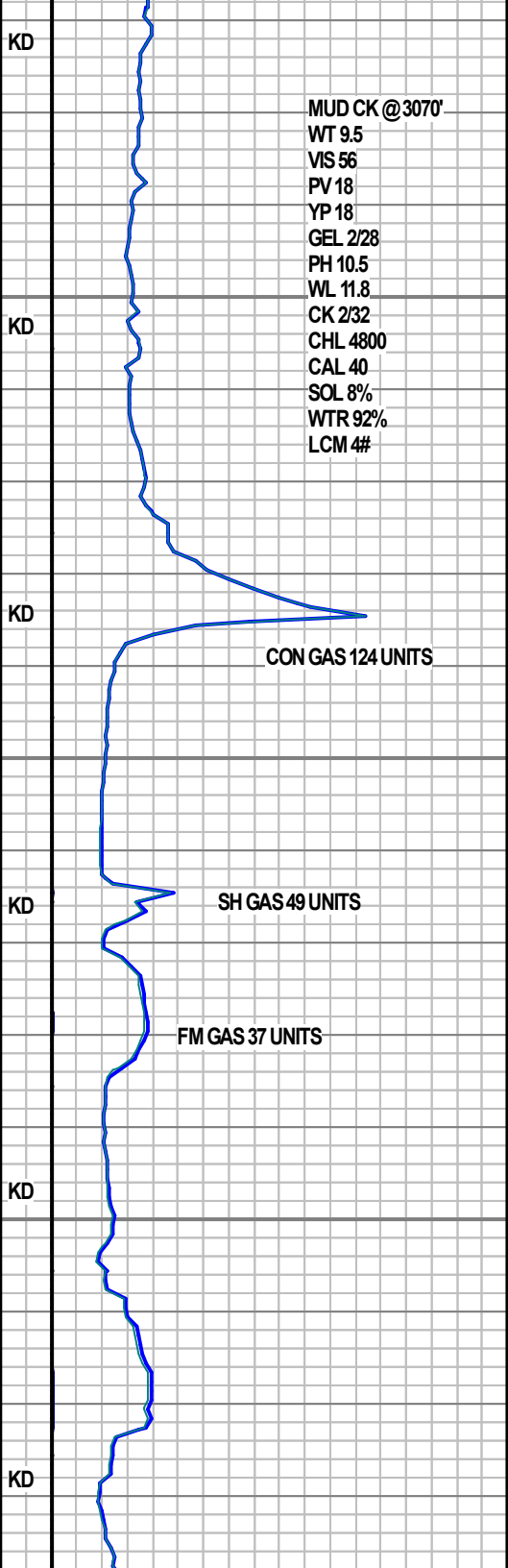
LS: CRM TO DK CRM, SM BUFF, SCAT BRN TO DK BRN, TR DK TAN, OCC OFF WHT TO WHT, FRM TO TR MOD FRM, BRTL, OCC CRMBLY, MSTLY V/FN XLN, SCAT TO SM MICRO XLN, OCC SLI SUC TXT, PLTY TO FLKY, OCC CHNKY, SCAT TO TR ARG, OCC MRLY IP, SCAT TO TR DOLC CMT, TR INTRBD DOLO, SCAT GLAUC, OCC V/FN IMBDD DOLO RHOMBS, TR ANHED CALCITE FL W/OCC LD POR, OCC MIN PYR INC., TR FOSS FRAGS W/OCC CRIN, NO VIS STAIN, NO ODOR, TR MOLDC POR, SCAT FRAC POR W/SM HAIRLINE, OCC XLN POR, SM LAM SH: GY TO DK GY, SCAT BLK, V/FN TXT, DULL LSTR, NON CALC, TR CARB, TR PYR INC., OCC MASS PYR, TR MICRO MICA, OCC DULL YEL FLOR, NO VIS CUT

DOUGLAS SHALE @ 3160'

(-1504')



SH: GY TO LT GY, SM V/LT GY, TR TO SCAT LT GRN TO V/LT GRNSH/GY, MOD SFT, SM MOD FRM, SM BRTL, FN TO V/FN TXT, SM SLTY TXT, NON CALC, SM MICS, OCC MIN PYR INC., SCAT SLTST W/TR SNDY IP, OCC INTRBD LS, SM LENTC/LAM SS: OFF WHT TO GY, LT GY, SM V/LT GY, MOD FRM, SM CRMBLY, FN L TO V/FN



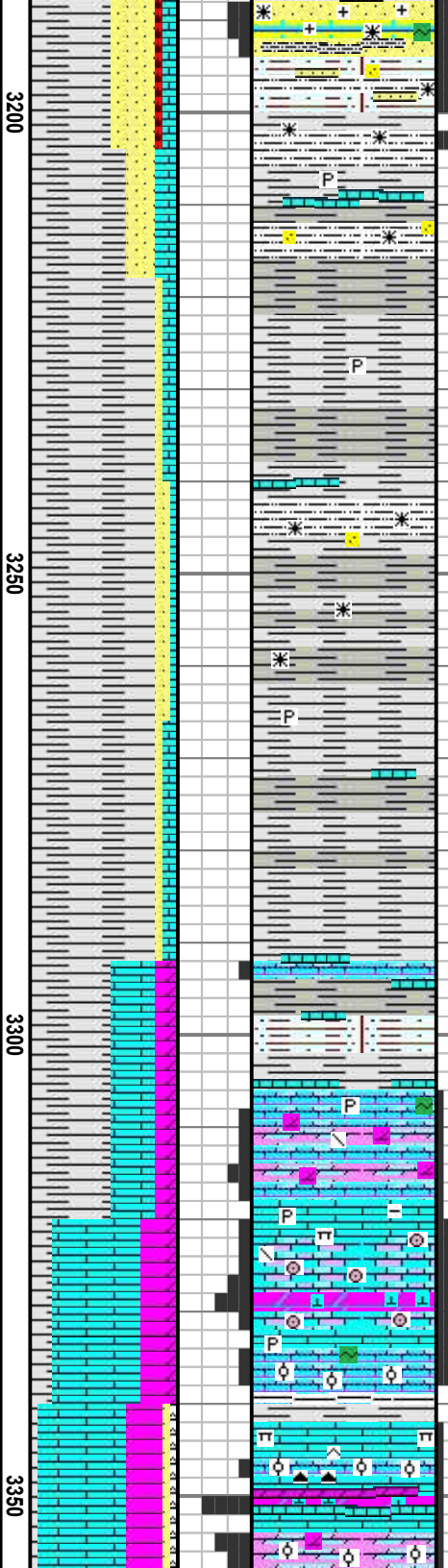
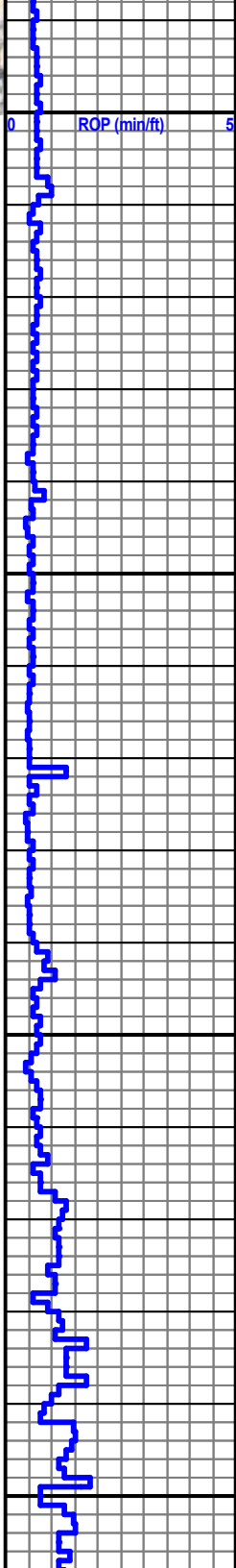
MUD CK @ 3070'
WT 9.5
VIS 56
PV 18
YP 18
GEL 2/28
PH 10.5
WL 11.8
CK 2/32
CHL 4800
CAL 40
SOL 8%
WTR 92%
LCM 4#

WOB-22.1K
RPM-97
PP-1378
SPM-103

DEV. SURVEY @
3302'
DEV. 0.5°

WOB-20.7K
RPM-93
PP-1332
SPM-100

06/15/2019



U GRNS, SM GRDING TO SLT, ANG GRNS, TR SUBANG
GRNS, WELL CONSL, FR SRTD, TR CALC CMT, TR
FELDSPR, SCAT INTST MICA, TR GLAUC, TR WSPY
GIL, NO ODOR, SM TT, SCAT XGRNLR POR, OCC DULL
YEL FLOR, NO CUT

SH: GY, SM DK GY, OCC BLK, OCC V/DK GY, MOD SFT
TO MOD FRM, SM SFT, OCC MSHY, SM FRM TO BRTL,
SMTH TXT, SM SLTY TXT, CHNKY, OCC PLTY, NON
CALC CMT, SM LT GY TO GY SS,

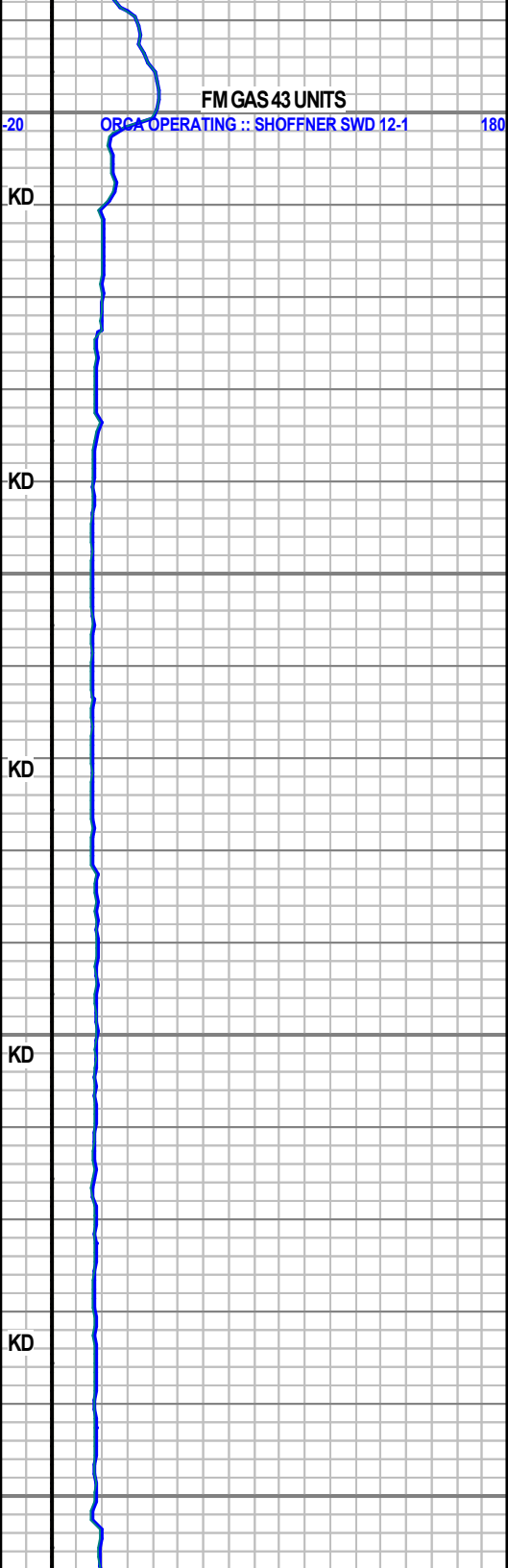
SH: GY TO LT GY, SM V/LT GY, TR TO SCAT LT GRN TO
V/LT GRNSH/GY, MOD SFT, SM MOD FRM, SM BRTL, FN
TO V/FN TXT, SM SLTY TXT, NON CALC, SM MICS, OCC
MIN PYR INC., SCAT SLTST W/TR SNDY IP,

LANSING @ 3305'

(-1649')

LS: OFF WHT TO V/LT CRM, SM LT CRM, TR CRM TO
DK CRM, OCC LT GY MOTT, OCC TANSH, MOD FRM,
OCC FRM, SCAT CRMBLY, V/FN TO SCAT FN XLN, TR
MICRO XLN, TR TO SCAT SUC TO FN SUC TXT, PLTY,
SCAT CHNKY, OCC BLKY, OCC ARG, OCC MRLY IP, SM
DOLO CMT, SM INTRBD DOLO, SCAT TO TR FN IMBDD
DOLO RHOMBS, OCC DRSY EUHED CALCITE, TR PYR
INC., OCC GLAUC, SCAT CRIN BIOCLST, TR OOLT
C W/FN DOLO MTX, OCC SPOT STAIN, OCC ASPHLTC
STAIN, NO ODOR, SCAT XLN POR, TR MOLDC POR, TR
V/FN TO HAIRLINE FRAC, OCC PP POR, TR YEL TO
DULL YEL FLOR, NO VIS CUT

LS: TAN TO DK TAN, TR BRN, SCAT GYSH/DK TAN, TR
LT GY MOTT, SCAT TO SM OFF WHT TO LT CRM, MOD





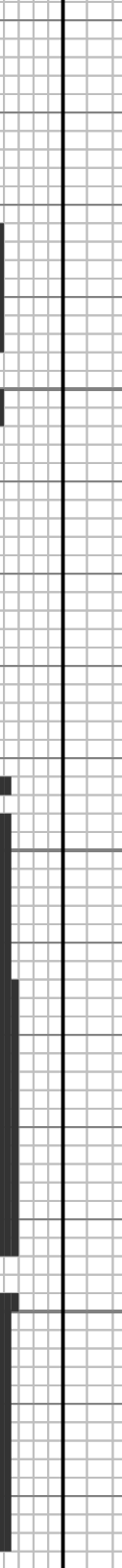
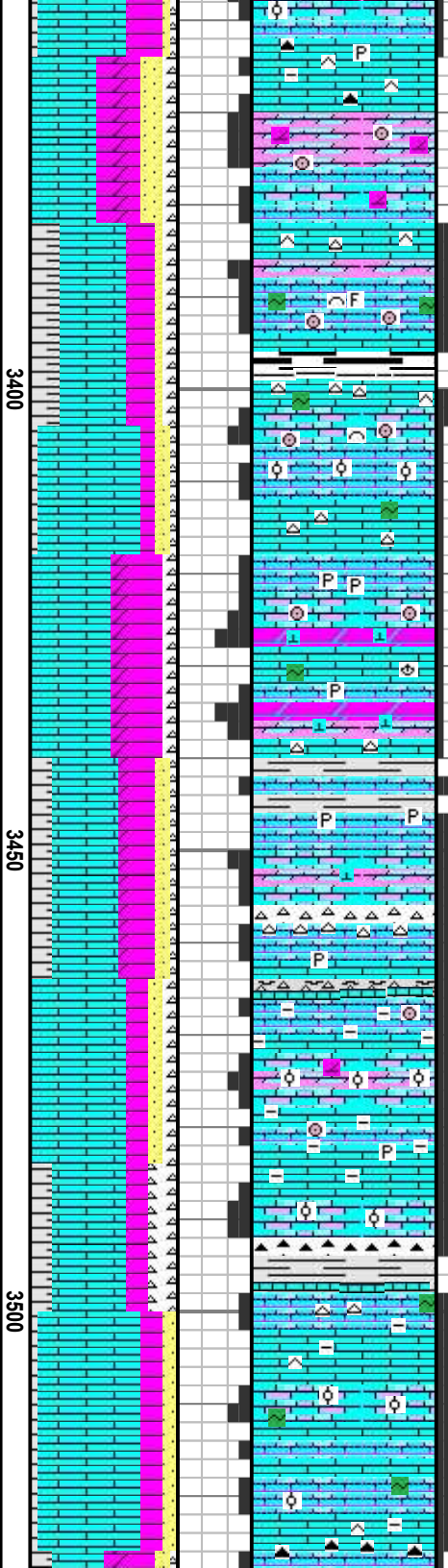
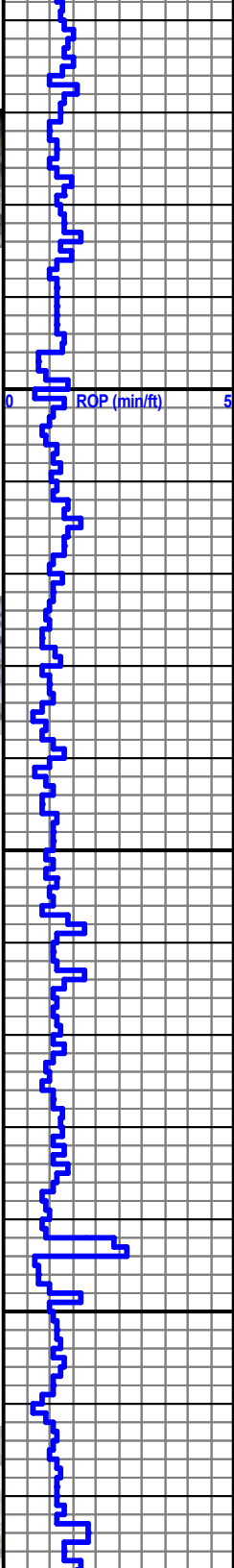
3382'



WOB-17.6K
RPM-92
PP-1412
SPM-102



3526'

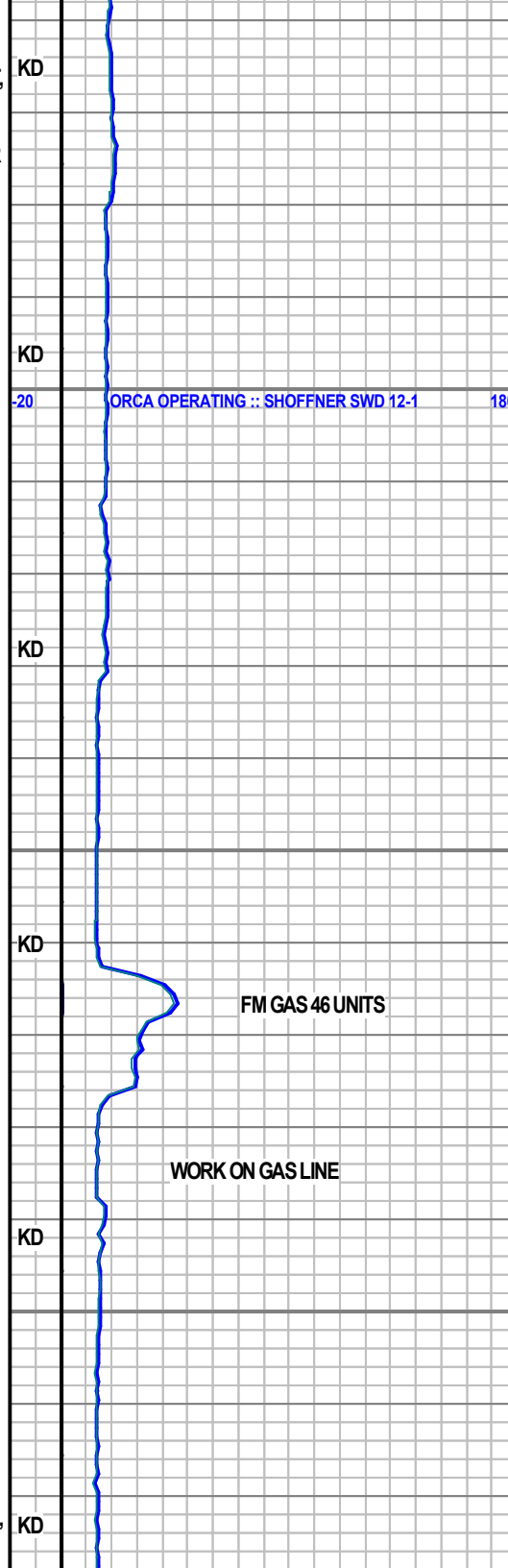


LS: OFF WHT TO VLT CRM, SM LT CRM, TR CRM TO LT TAN, TR TAN MOTT, OCC DK TAN TO BRN MOTT, MSTLY MOD FRM, OCC FRM, BRTL, SM TO SCAT CRMBLY, FN TO V/FN XLN, OCC MICRO XLN, CHNKY TO PLY, OCC FLKY, INCRSE ARG, SM DOLO CMT, TR SIL, SCAT TO SM INTRBD DOLO, OCC LAM DOLO, TR GLAUC, TR WHT TO OFF WHT SHRP SMANG HRD TR SPIC CHRT W/SCAT WTHRD IP, OCC PYR INC., OCC ANHED TO FLKY/PLY OPQ CALCITE FL, SCAT BIOCLST W/CRIN, OCC OOLT C W/TR FN SUC DOLC MTX, NO VIS STAIN, NO ODOR, SCAT TO TR XLN POR, TR PP POR, TR MOLDC POR, OCC TO TR V/FN FRAC, OCC DULL YEL TO TR DULL DK YEL FLOR, NO VIS CUT

LS: OFF WHT TO VLT CRM, SM LT CRM, TR CRM TO LT TAN, TR TAN MOTT, OCC DK TAN TO BRN MOTT, MSTLY MOD FRM, OCC FRM, BRTL, SM TO SCAT CRMBLY, FN TO V/FN XLN, OCC MICRO XLN, CHNKY TO PLY, OCC FLKY, INCRSE ARG, SM DOLO CMT, TR SIL, SCAT TO SM INTRBD DOLO, OCC LAM DOLO, TR GLAUC, TR WHT TO OFF WHT SHRP SMANG HRD TR SPIC CHRT W/SCAT WTHRD IP, OCC PYR INC., OCC ANHED TO FLKY/PLY OPQ CALCITE FL, SCAT BIOCLST W/CRIN, OCC OOLT C W/TR FN SUC DOLC MTX, NO VIS STAIN, NO ODOR, SCAT TO TR XLN POR, TR PP POR, TR MOLDC POR, OCC TO TR V/FN FRAC, OCC DULL YEL TO TR DULL DK YEL FLOR, NO VIS CUT

LS: TAN TO DK TAN, TR BRN, SCAT GYSH/DK TAN, TR OFF WHT TO LT CRM, MOD FRM, SM FRM, BRTL, FN XLN, SCAT MICRO XLN, OCC SUC TXT, PLY, TR BLKY, OCC SUB CONCH, TR TO SCAT ARG, SCAT SIL, SCAT DOLO CMT, DECRSE INTRBD DOLO, TR MLKY WHT SHRP ANG TR WTHRD CHRT W/TR SPIC, TR PYR INC., OCC CRIN FRAGS, OCC OOLT W/TR IN FN DOLC MTX, NO VIS STAIN, NO ODOR, SCAT HAIRLINE FRAC, TR XLN POR, TR MOLDC POR, SCAT YEL TO DULL PALE YEL FLOR, NO VIS CUT

LS: TAN TO DK TAN, TR BRN, SCAT GYSH/DK TAN, TR OFF WHT TO LT CRM, MOD FRM, SM FRM, BRTL, FN XLN, SCAT MICRO XLN, OCC SUC TXT, PLY, TR BLKY, TR TO SCAT ARG, SCAT SIL, SCAT DOLO CMT, TR INTRBD DOLO, TR MLKY WHT TO DK GY SHRPANG TR WTHRD CHRT W/OCC SPIC, TR PYR INC., OCC OOLT W/TR IN FN DOLC MTX, NO VIS STAIN, NO ODOR, SCAT HAIRLINE FRAC, TR XLN POR, OCC YEL FLOR, NO VIS CUT



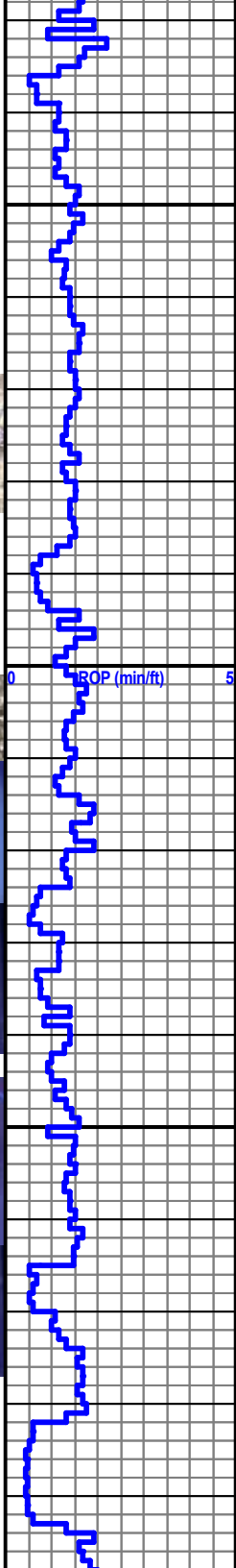
WOB-22.4K
RPM-100
PP-1465
SPM-104

3582'

3646'

3666'

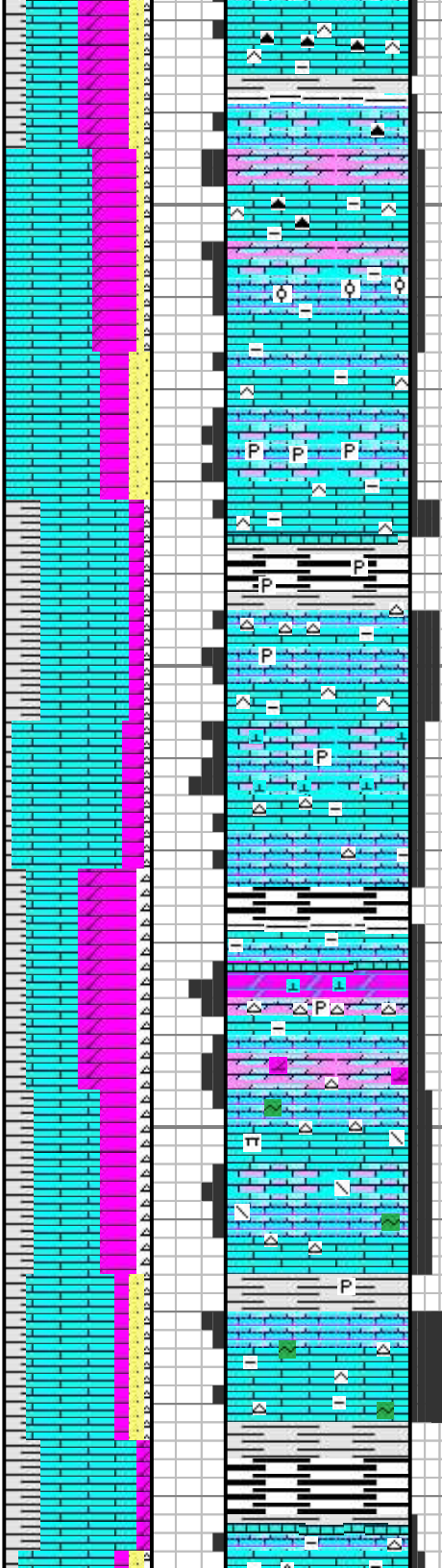
WOB-23.4K
RPM-92
PP-1538
SPM-109



3550

3600

3650



NO VIS CUT

LS: OFF WHT TO VLT CRM, SM LT CRM, TR CRM TO LT TAN, OCC DK TAN TO BRN MOTT, MSTLY MOD FRM, SCAT FRM, BRTL, OCC CRMBLY, FN TO VFN XLN, OCC MICRO XLN, CHNKY TO PLTY, OCC FLKY, INCRSE ARG, SM DOLO CMT, TR SIL, SCAT INTRBD DOLO, TR GLAUC, TR DK GY TO OFF WHT SHRPANG HRD TR SPIC CHRT, OCC MED EUHED DRYSY PYR, OCC MIN PYR INC., OCC OOLTC W/OCC FN SUC DOLC MTX, NO VIS STAIN, NO ODOR, SCAT TO TR XLN POR, TR PP POR, TR MOLDC POR, OCC TO TR VFN FRAC, OCC DULL YEL FLOR, NO VIS CUT

STARK @ 3587'

(-1931')



SWOPE @ 3594'

(-1938')



LS: DK CRM TO VLT TAN, TR TAN, TR TO OCC LT BRN, OCC OFF WHT, OCC LT CRM, FRM, TR V/FRM, BRTL, MICRO XLN, TR FN XLN, OCC SUC TXT, PLTY TO BLKY, TR ARG, SCAT SIL, SCAT DOLC CMT, OCC INTRBD DOLO, TR OPQ TO BLU/GY SHRPANG SPIC CHRT, OCC MIN PYR INC., OCC MIN ANHED DRYSY CALCITE, NO VIS STAIN, NO ODOR, TR XLN POR, TR PP POR, SCAT HAIRLINE FRAC, SCAT DK YEL TO YEL FLOR, NO VIS CUT

HUSHPUCKNEY @ 3624'

(-1968')



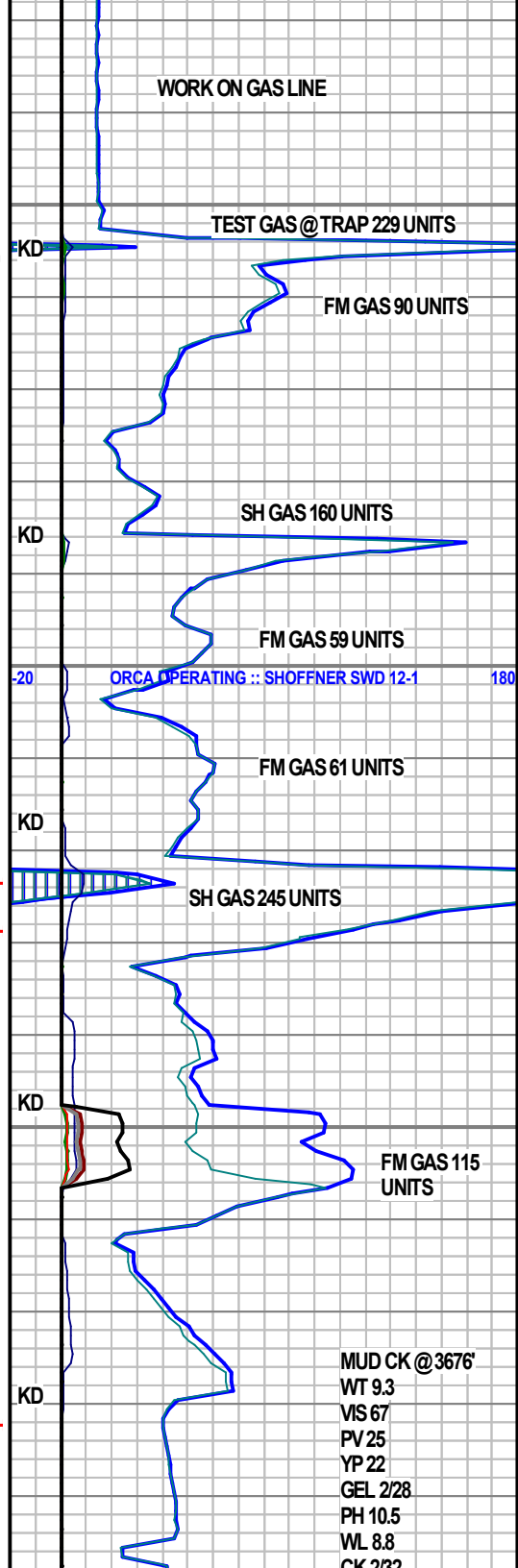
HERTHA @ 3629'

(-1973')

LS: CRM TO LT CRM, SCAT OFF WHT, OCC BUFF, TR TAN TO LT TAN MOTT, OCC TO TR LT GYSH, MOD FRM, OCC FRM, BRTL, MSTLY MICRO XLN, TR V/FN TO FN XLN, OCC SLI SUC TXT, PLTY, BLKY, OCC CHNKY, OCC ARG, OCC MRLY IP, SCAT DOLC CMT, SCAT TO DECREASING LAM INTRBD DOLO, TR WHT TO LT GY HRD SHRPANG CHRT W/OCC PYRC, OCC V/FN IMBDD DOLO RHOMBS, TR GLAUC, OCC ASPHLTC STAIN ALONG FRAC, NO ODOR, TR PP POR, TR TO OCC XLN POR, SCAT FRAC POR, SCAT YEL TO DULL PALE YEL FLOR, TR SLO WK TO MOD FR STRMING PALE YEL CUT, WK TO FR THN YEL RES RING

KANSAS CITY @ 3682'

(-2026')



WORK ON GAS LINE

TEST GAS @ TRAP 229 UNITS

FM GAS 90 UNITS

SH GAS 160 UNITS

FM GAS 59 UNITS

ORCA OPERATING :: SHOFFNER SWD 12-1 180

FM GAS 61 UNITS

SH GAS 245 UNITS

FM GAS 115 UNITS

MUD CK @ 3676'

WT 9.3

VIS 67

PV 25

YP 22

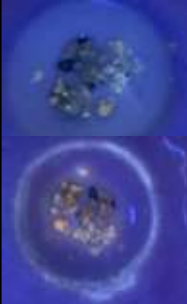
GEL 2/28

PH 10.5

WL 8.8

CK 2/22

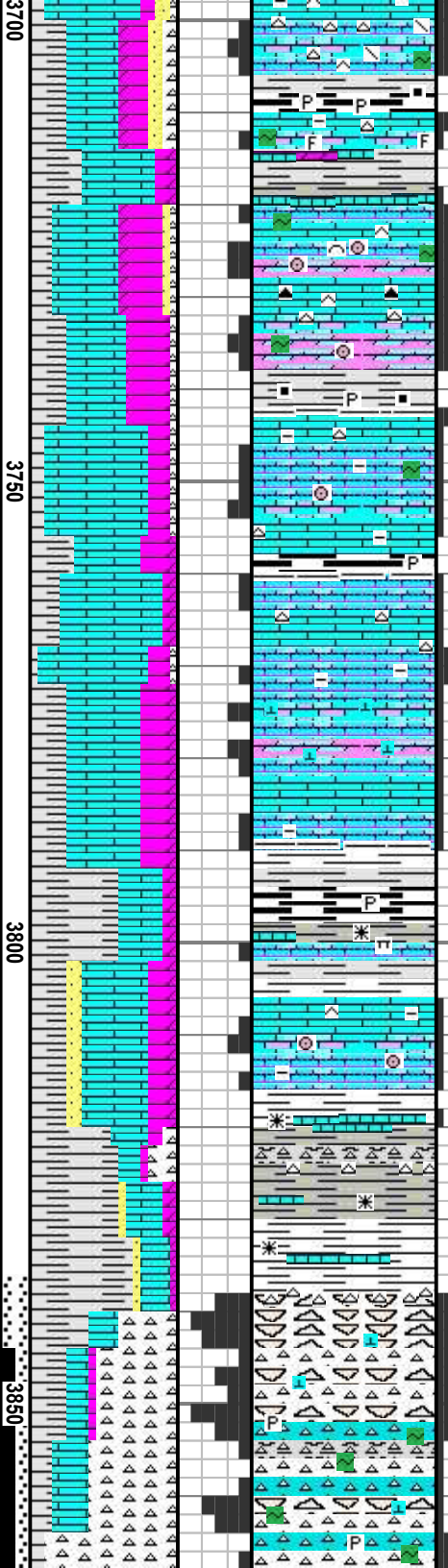
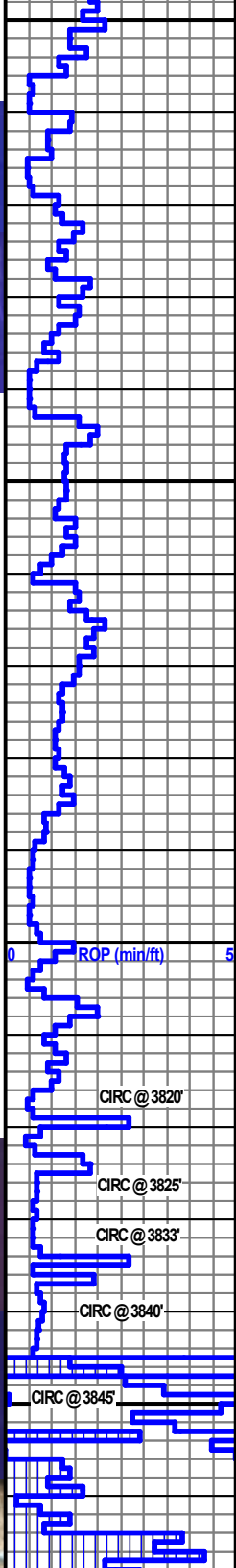
3732



WOB-21.6K
RPM-92
PP-1434
SPM-106

TOH TO P/U CORE
BARREL @ 3845'
3845'

06/16/2019



PLEASANTON SHALE @ 3706'

(-2050')

LS: CRM TO DK CRM, TR BUFF, OCC GYSH MOTT, TR BRN TO DK TAN MOTT, OCC OFF WHT, FRM, SCAT V/FRM, BRTL, MSTLY MICRO XLN, SCAT FN XLN, PLTY, SM BLKY, OCC CHNKY, TR ARG, SCAT DOLC CMT, TR INTRBD DOLO, TR GLAUC, OCC MIN PYR INC., OCC DK GY SHRPANG CHRT, TR FOSS FRAGS, OCC CRIN BIOCLST, NO VIS STAIN, NO ODOR, SCAT FRAC POR, OCC PP POR, SM LAM SH: LT GY TO GY, SCAT PRPL, TR RDSH, TR LT TO VLT GRNSH, OCC MAROON, MOD SFT, SM MOD FRM, SM BRTL, SMTH TO FN TXT, DULL LSTR, PLTY, TR CHNKY, NON CALC, SCAT SLTY IP, OCC SLTST, SCAT MICRO MICA, OCC DULL YEL FLOR, OCC SLO V/WK STRMNG STRW CUT, V/WK THN SPTTY STRW YEL RES RING

LS: DK CRM TO CRM, VLT TAN, SCAT LT TAN, OCC DK GY TO DK TAN MOTT, TR OFF WHT, MOD FRM, SM FRM, BRTL TO V/BRTL, V/FN TO MICRO XLN, OCC PACKST, PLTY, TR FLKY, TR BLKY, TR ARG, OCC MRLY, TR SIL, SCAT TO SM DOLC CMT, OCC INTRBD DOLO, OCC MIN PYR INC., OCC WHT TO OFF WHT SHRPANG SPIC CHRT, OCC FN TO MED DRSY EUHED CALCITE, NO VIS STAIN, NO ODOR, TR PP TO VUG POR, OCC XLN POR, TR HAIRLINE FRAC, SM LAM SH: LT GY TO GY, SCAT PRPL, TR RDSH, TR LT TO VLT GRNSH, OCC MAROON, MOD SFT, SM MOD FRM, SM BRTL, SMTH TO FN TXT, DULL LSTR, PLTY, TR CHNKY, NON CALC, SCAT SLTY IP, OCC SLTST, SCAT MICRO MICA, OCC PYRC W/TR MED EUHED, TR TO SCAT CARB, OCC DULL YEL FLOR, NO VIS CUT

CHEROKEE @ 3789'

(-2133')

SH: LT GY TO GY, OCC VLT GY, SCAT PRPL, SCAT MAROON, OCC YEL, MOD SFT, TR SFT, TR MOD FRM, SCAT MSHY, SMTH TO V/FN TXT, ERTHY LSTR, NON CALC, TR SLTY IP, TR PYR INC. WOCC MED EUHED, OCC MICRO MICA, TR THN BDD/INTRBD OFF WHT TO GYSH/OPQ SHRP ANG CHRT W/TR SPIC, TR LAM LS: LS: DK CRM TO CRM, VLT TAN, SCAT LT TAN, OCC DK GY TO DK TAN MOTT, TR OFF WHT, MOD FRM, BRTL TO V/BRTL, V/FN TO MICRO XLN, PLTY, TR FLKY, TR ARG, OCC MRLY, SCAT DOLC CMT, OCC INTRBD DOLO, OCC WHT TO OFF WHT SHRPANG SPIC CHRT, OCC PYR INC., OCC CRIN FRAGS, NO VIS STAIN, NO ODOR, TR PP TO VUG POR, OCC XLN POR, TR HAIRLINE FRAC, OCC DUL YEL LOR, NO CUT

MISSISSIPPI @ 3837'

(-2181')

CHRT: OFF WHT TO WHT, SM CRM, SCAT LT CRM, TR DK CRM TO LT TAN MOTT, FRM TO SM HRD, SM TO SCAT CRMBLY, V/FN XLN, SM TO INCRSNG MICRO/CRYPTO XLN, SM CHNKY, TR PLTY, TR CALC, SM BRECCIA, SCAT TO SM TRIP W/TR MIN PITTING, TR OFF WHT/OPQ SHRP ANG SPIC, TR FN DRSY CALCITE EUHED, OCC MIN PYR INC., OCC GLAUC W/TR GLAUC MTX, TR LT TAN STAIN IN VUGS, NO ODOR, SM PP TO FN VUG POR, SCAT TO TR XLN POR, OCC HAIRLINE/STYLTC FRAC, TR DULL YEL TO OCC DULL PALE YEL FLOR, TR WK TO MOD FR MLKY STRW CUT WHEN CRUSHED, MOD FR PALE YEL RES RING

CR 232
CHL 3750
CAL 40
SOL 6.8%
WTR 93.2%
LCM 4#

FM GAS 51 UNITS

FM GAS 48 UNITS

FM GAS 56 UNITS

FM GAS 51 UNITS

FM GAS 50 UNITS

TRIP GAS 163 UNITS
FM GAS 28 UNITS

KD
KD
KD
KD
KD
KD

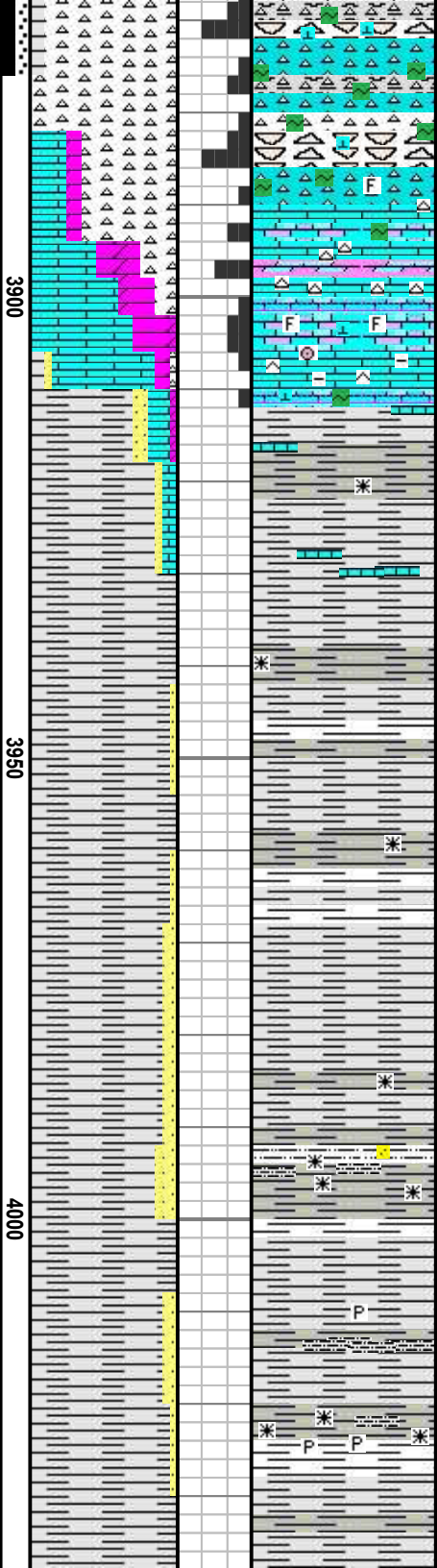
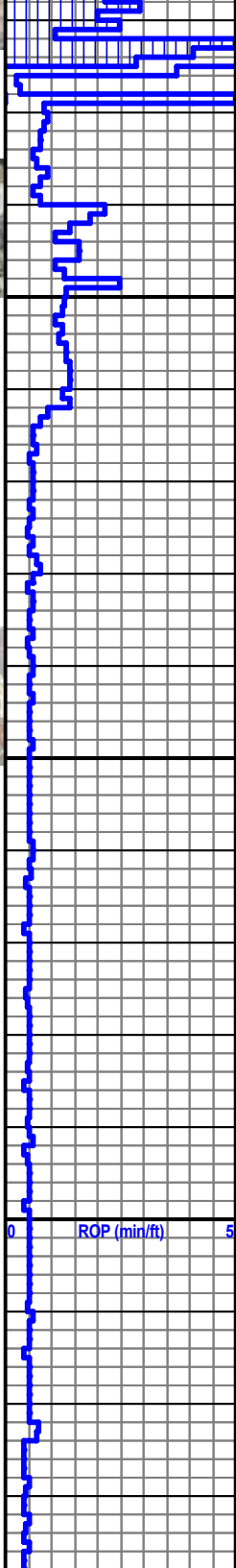
ORCA OPERATING :: SHOFFNER SWD 12-1 180

3864'
06/17/2019

3882'

WOB-19.8K
RPM-92
PP-1408
SPM-110

3942'



TOH FOR DST @ 3875' :: NB #4 ::
8.75" :: JZ :: PL516 :: SO8423 :: JETS 5 X
14'S :: IN @ 3875'

LS: OFF WHT TO LT CRM, SCAT CRM, TR DK CRM TO BUFF MOTT,
TR TANSH STRKS/STRI, OCC PRPL MOTT, FRM, SM MOD FRM,
BRTL, MSTLY MICRO XLN, SCAT V/FN XLN, PLTY, OCC BLKY, OCC
ARG, TR SIL, TR TO SCAT DOLO CMT, TR INTRBD DOLO, OCC
ANHED CALCITE FL, TR BLU/WHT SHRP ANG CHRT, TR GLAUC,
OCC SIL OCCLD FRAC, OCC FOSUS W/SUC MTX, NO VIS STAIN, NO
ODOR, SM FRAC POR, TR TO OCC XLN POR, TR TO OCC DULL YEL
FLOR, OCC DK YEL FLOR, NO CUT

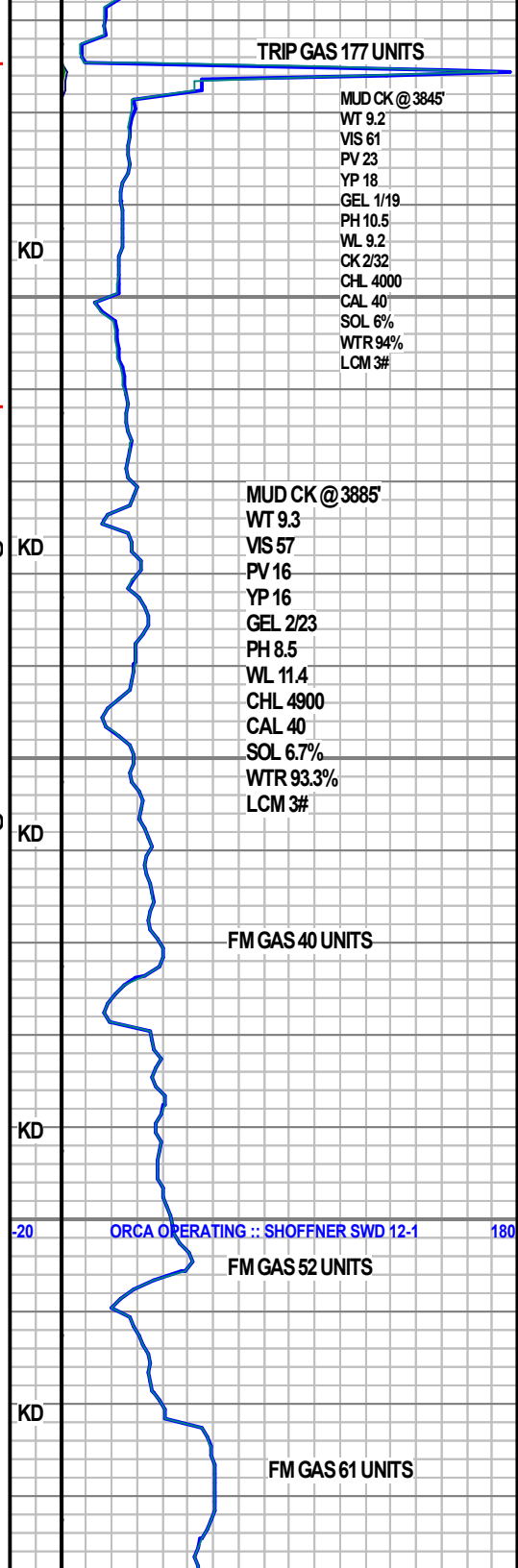
KINDERHOOK @ 3912'
(-2256')

SH: LT GY, SM GY, OCC VLT GY, TR BRNSH/GY, OCC TO
TR GRNSH, MOD FRM, SM MOD SFT, SM BRTL, OCC
MSHY, SMTH TO TR V/FN TXT, MSTLY DULL LSTR,
OCC SUB WXY LSTR, NON CALC, OCC MICROMICA,
TR TO OCC SLTY IP, OCC INTRBD CRM TO DK CRM
MICRO XLN LS,

SH: LT GY, SM GY, OCC VLT GY, TR BRNSH/GY, OCC TO
TR GRNSH, MOD FRM, SM MOD SFT, SM BRTL, OCC
MSHY, SMTH TO TR V/FN TXT, MSTLY DULL LSTR,
OCC SUB WXY LSTR, NON CALC, OCC MICROMICA,
TR TO OCC SLTY IP,

SH: DK GY TO GY, SCAT LT GY, MOD SFT, SCAT SFT,
BLKY, SM PLTY, OCC CHNKY, V/FN TXT, SCAT SLTY
TXT, SLI CALC, OCC MICS, OCC MIN PYR INC., TR
SLTST W/MICS,

SH: LT GY, SM GY, OCC VLT GY, TR DKGY, OCC
GRNSH, MOD FRM, OCC MOD SFT, SM BRTL, V/FN
TXT, SM SMTH TXT, MSTLY DULL LSTR, NON CALC,
SCAT MICRO MICA, TR TO TR SLTY IP, OCC MIN PYR
INC.,



SH: LT GY, SM GY, OCC VLT GY, SCAT, DKGY, OCC BLK, MOD FRM

WOB-20.1K
RPM-98
PP-1402
SPM-107

OCC DK
AMBER FLOR

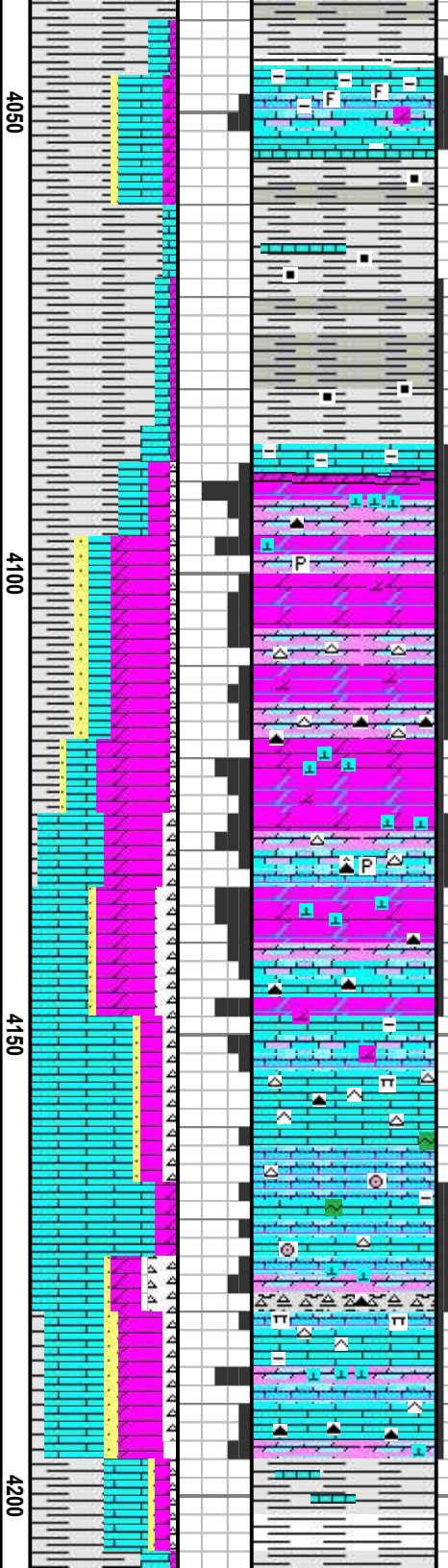
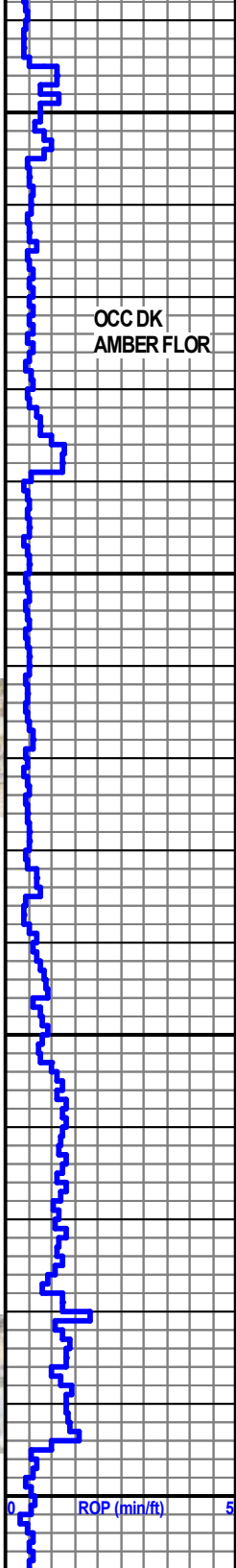
4126'



WOB-20.5K
RPM-91
PP-1487
SPM-112



4196'



SP: LT GY, SM GY, OCC VLT GY, SCAT DRGY, OCC BLK, MOD FRM,
OCCFRM, SM BRTL, V/FN TXT, SM SMTH TXT, MSTLY DULL LSTR,
NON CALC, SCAT MICRO MICA, TR TO TR SLTYIP, TR MIN PYR INC,
TR CARB, TR LAM LS: CRM TO LT CRM, OCC BUFF, MOD FRM, SM
FRM, BRTL, MICRO XLN, SCAT V/FN XLN, PLTY, OCC CHNKY, TR
ARG, SCAT DOLO CMT, OCC V/FN IMBDD DOLO RHOMBS, TR
FOSUS, NO VIS STAIN, NO ODOR, SCAT FN TO HAIRLINE FRAC,
OCC XLN POR, OCC YEL FLOR, NO VIS CUT

CHATTANOOGA @ 4055'

(-2399')

VIOLA @ 4086'

(-2429')

DOLO: LT TO MED GY, SM VLT GY, SM TO SCAT OFF
WHT, TR LT CRM, TR OPQ, OCC WHT, MOD FRM,
CRMBLY, FN TO MED XLN, SCAT V/FN XLN, SM SUC
TXT W/TR BECMNG V/FN SUC TXT, CHNKY, TR PLTY,
SM CALC CMT, OCC SIL, SCAT TO TR INTRBD LS, OCC
LAM CRM TO DK CRM BUFF MICRO XLN PLTY ARG
LS, OCC DRSY CALCITE, OCC PYRC, TR IMBDD MED
DOLO RHOMBS, TR DK GY TO BLU/GY OCC OFF WHT
TR VLT TAN MOTT V/SHRPANG CHRT W/TR PYRC,
OCC VLT SPOT STAIN, N ODOR, SM XLN POR, OCC PP
POR, TR TO OCC DULL DK YEL TO VDULL DK YEL
FLOR, NOVISCUT

LS: CRM, SM DK CRM, TR TO SCAT V/DK CRM TO LT
TAN, TR BUFF, OCC WHT, TR OFF WHT, OCC BRN
MOTT, FRM, SM V/FRM, BRTL, MSTLY MICRO XLN, TR
FN XLN, OCC SLI SUC TXT, PLTY, OCC BLKY, TR
CONCH, TR TO OCC ARG, OCC MRLYIP, SCAT SIL
CMT, SCAT TO TR DOLC CMT, TR INTRBD DOLO,
SCAT OPQ GYSH TO OFF WHT/TAN MOTT TR PYRC
CRYPTO XLN V/SHRPV/ANG CHRT W/OCC SPIC, OCC
ANHED CALCITE FL, OCC GLAUC, OCC DRSY PYR,
OCC FOSS FRAGS W/CRIN, TR TO OCC ASPHLTC
STAIN ALONG POR, SCAT FRAC W/SM HAIRLINE, OCC
MOLDC POR, OCC XLN POR, TR DK DULL YEL TO
AMBER FLOR W/SM DULL, NO VIS CUT

ST. PETER @ 4213'

FM GAS 53 UNITS

FM GAS 58 UNITS

FM GAS 116 UNITS

FM GAS 95 UNITS

FM GAS 94 UNITS

CON GAS 190 UNITS

FM GAS 139 UNITS

FM GAS 75 UNITS

FM GAS 69 UNITS

KD

KD

KD

KD

KD

-20

ORCA OPERATING :: SHOFFNER SWD 12-1

180

4246'

WOB-20.4K
RPM-88
PP-1629
SPM-111

BOTTOMS UP 4326'

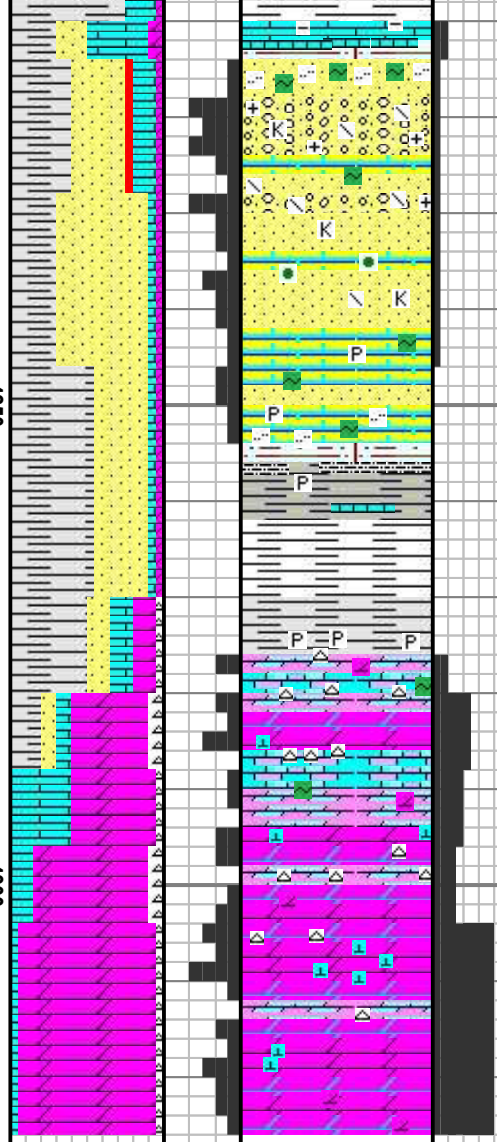
06/17/2019

ROP

4250

4300

4350



(-2557')

SS: LT TO V/LT GY, TR GRNSH/GY, SCAT OPQ TO TRNSL, OCC OFF WHT, MOD FRM, SCAT V/FRM, MSTLY CRMBLY, SM BRTL, V/FN L TO FN L GRNS, SM FN U TO MED L GRNS, FINNING DOWNWARD, SUB RND GRNS, OCC RND GRNS, WELL CONSL, TR UNCONSL, FR SRTD, OCC CALC CMT, TR WELL IND, TR KAOL, TR GLAUC, OCC CRSE L WELL RND UNCONSL QRTZ GRN, OCC INTST GL, OCC MIN PYR INC., NO ODOR, SCAT XGRNLR POR, OCC V/DULL YEL TO DULL DK YEL FLOR, NO VIS CUT

SH: GY TO DK GY, SCAT GRN, TR DK TO V/DK GRN, FRM, BRTL, MSTLY SMTH TXT, OCC V/FN TXT, DULL LSTR, BLKY TO PLY, NON CALC, OCC SLTY IP, TR PYR INC.,

ARBUCKLE @ 4276'

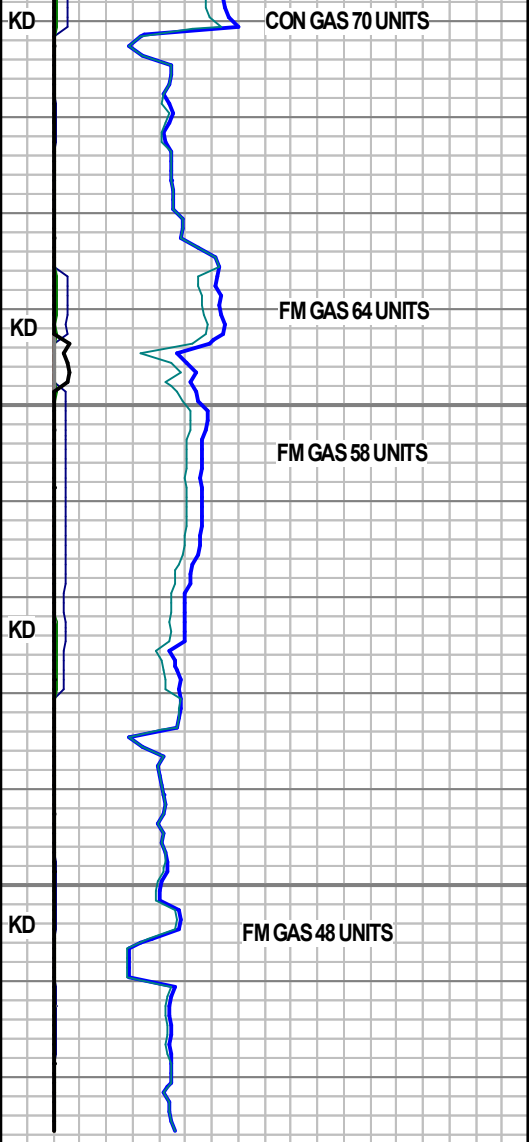
(-2620')

DOLO: LT CRM TO OFF WHT, SM V/LT CRM, TR TO OCC TAN TO DK TAN, OCC BUFF, FRM, TR V/FRM, BRTL, FN TO MED XLN, SCAT V/FN XLN, TR SUC TXT, CHNKY, SM PLY, OCC FLKY, SCAT CALC CMT, TR TO OCC INTRBD LS, TR DRSY MED EUHED CALCITE, OCC DRSY RHOMB/EUHED DOLO, OCC PYRC, OCC GLAUC, TR WHT TO MLKY WHT V/SHRPANG CHRT, NO VIS STAIN, NO ODOR, SCAT PP POR, TR TO SCAT VUG POR, TR XLN POR, TR FRAC POR W/OCC DISS, SCAT TO SM YEL FLOR W/OCC DK YEL, NO VIS CUT

DRILLER'S TD FOR CASING @ 4326'
-2670' ON 06/17/2019

ORCA OPERATING COMPANY
SHOFFNER SWD 12-1
SEC. 12-25S-09W
RENO CO, KS
GL: 1644' KB: 1656'

SHL: 775' FSL & 380' FEL OF SW NE
SE SE OF SEC. 12-25S-09W RENO
CO., KS



GAS

0

ROP (min/ft)

5

4400



-20

ORCA OPERATING :: SHOFFNER SWD 12-1

180



TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Orca Operating Co
 427 S Boston Ste 400
 Tulsa, OK 74103
 ATTN: Harold Watts

12-25S-9W Reno
Shoffner 12-1
 Job Ticket: 65876 **DST#: 1**
 Test Start: 2019.06.16 @ 12:42:00

GENERAL INFORMATION:

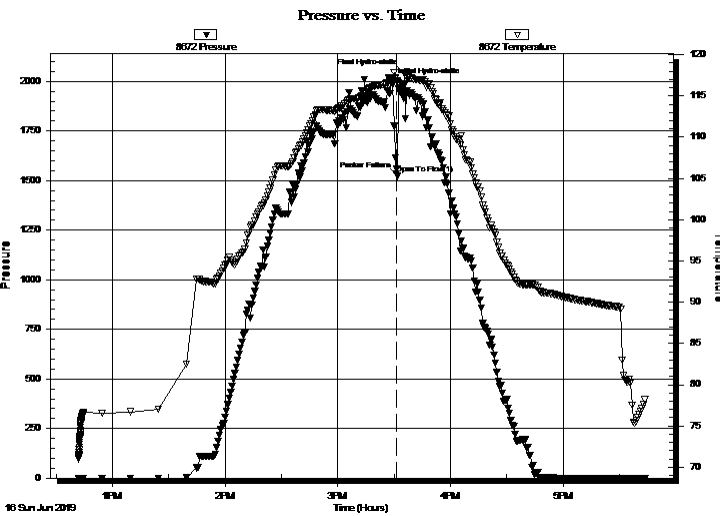
Formation: **Mississippi**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Initial)
 Time Tool Opened: 15:31:02 Tester: Leal Cason
 Time Test Ended: 17:44:02 Unit No: 74
 Interval: **3846.00 ft (KB) To 3875.00 ft (KB) (TVD)** Reference Elevations: 1657.00 ft (KB)
 Total Depth: 3875.00 ft (KB) (TVD) 1644.00 ft (CF)
 Hole Diameter: 8.75 inches Hole Condition: Good KB to GR/CF: 13.00 ft

Serial #: 8672

Inside

Press@RunDepth: psig @ 3830.00 ft (KB) Capacity: psig
 Start Date: 2019.06.16 End Date: 2019.06.16 Last Calib.: 2019.06.16
 Start Time: 12:42:01 End Time: 17:44:02 Time On Btm: 2019.06.16 @ 15:28:47
 Time Off Btm: 2019.06.16 @ 15:35:32

TEST COMMENT: IF: Packer Failure, Tried to Reset, Failed Again, Pulled Test



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1995.75	117.02	Initial Hydro-static
3	1532.83	117.25	Open To Flow (1)
3	1521.35	116.73	Packer Failure
7	2040.12	116.51	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
813.00	Mud	7.36

Gas Rates

Choke (inches)	Pressure (psig)	Gas Rate (MMcf/d)



**TRILOBITE
TESTING, INC.**

DRILL STEM TEST REPORT

FLUID SUMMARY

Orca Operating Co

12-25S-9W Reno

427 S Boston Ste 400
Tulsa, OK 74103

Shoffner 12-1

Job Ticket: 65876

DST#: 1

ATTN: Harold Watts

Test Start: 2019.06.16 @ 12:42:00

Mud and Cushion Information

Mud Type: Gel Chem

Cushion Type:

Oil API:

deg API

Mud Weight: 9.00 lb/gal

Cushion Length:

ft

Water Salinity:

ppm

Viscosity: 61.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 9.19 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 4000.00 ppm

Filter Cake: 0.02 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
813.00	Mud	7.364

Total Length: 813.00 ft Total Volume: 7.364 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

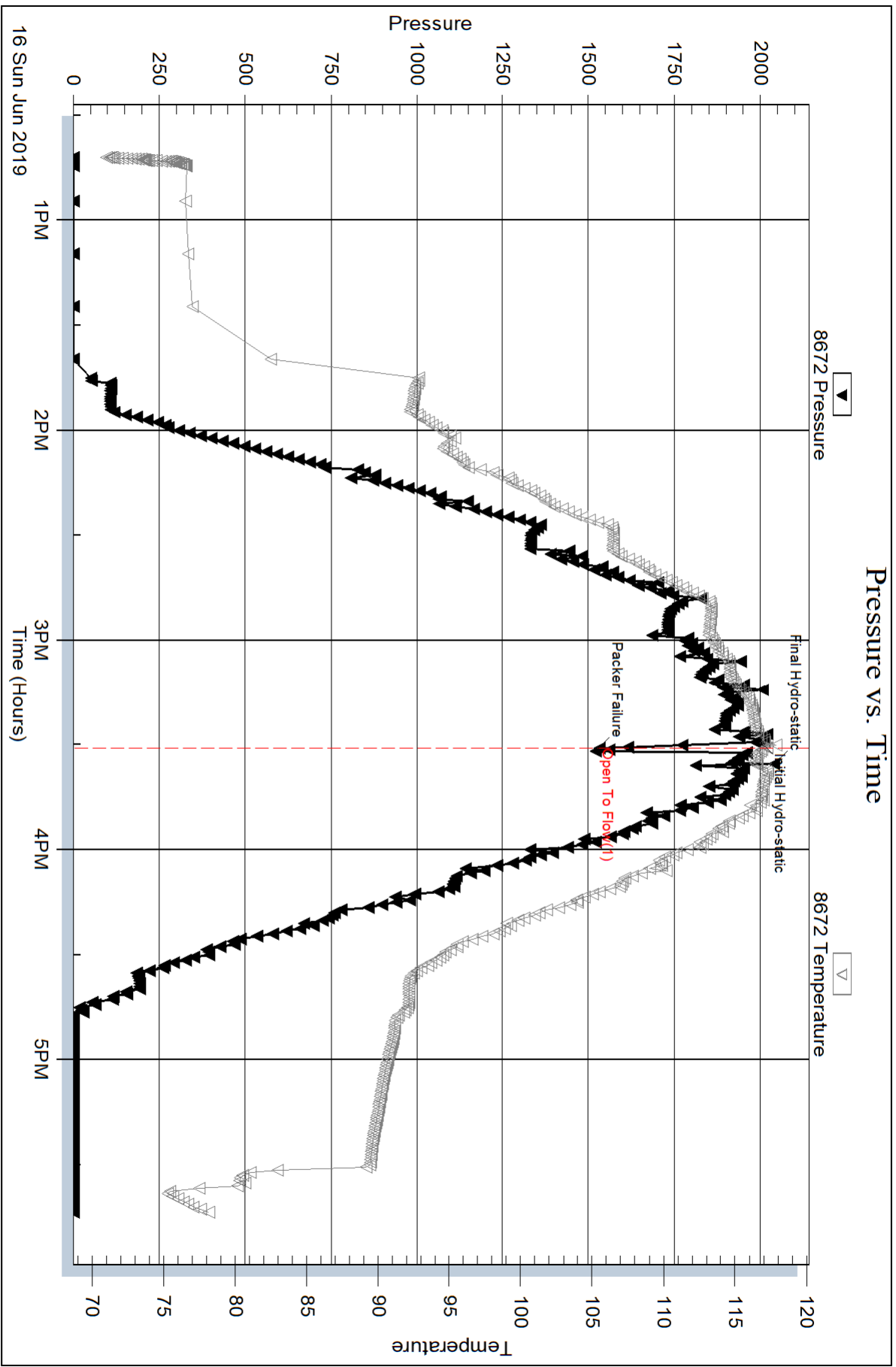
Serial #: 8672

Inside

Orca Operating Co

Shoffner 12-1

DST Test Number: 1



Triobite Testing, Inc

Ref. No: 65876

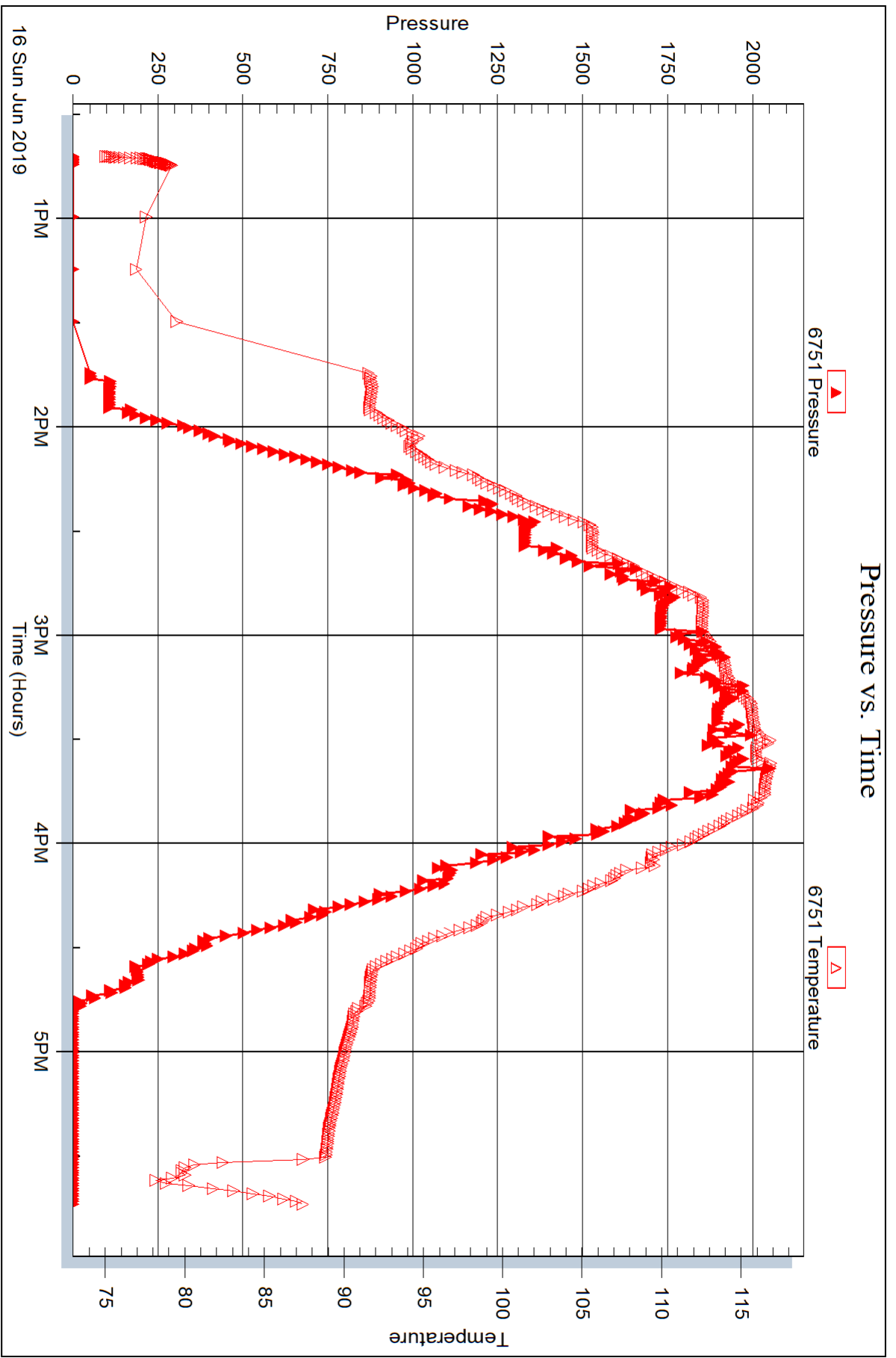
Printed: 2019.06.17 @ 04:26:06

Serial #: 6751

Outside Orca Operating Co

Shoffner 12-1

DST Test Number: 1



Customer <i>ORCA operations</i>	Lease No.	Date <i>6-20-19</i>
Lease <i>Scholar SWD</i>	Well # <i>12-1</i>	
Field Order #	Station <i>Pratt KS "1718"</i>	Casing
Type Job <i>Plug lost mouse hole Duk #9</i>	Depth	County <i>Pratt</i>
	Formation	State <i>KS</i>
		Legal Description

PIPE DATA		PERFORATING DATA		FLUID USED	TREATMENT RESUME		
Casing Size	Tubing Size	Shots/Ft		Acid	RATE	PRESS	ISIP
Depth	Depth	From	To	Pre Pad	Max		5 Min.
Volume	Volume	From	To	Pad	Min		10 Min.
Max Press	Max Press	From	To	Frac	Avg		15 Min.
Well Connection	Annulus Vol.	From	To		HHP Used		Annulus Pressure
Plug Depth	Packer Depth	From	To	Flush	Gas Volume		Total Load

Customer Representative <i>Shardliff Watts</i>	Station Manager <i>Justin Westerman</i>	Treater <i>Paul Baldwin</i>
Service Units <i>27465 20959 21010</i>		
Driver Names <i>Edi - W Wade Brown</i>		

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
					On location 11:15 AM
					Have safety meeting + Dig up
					Run 2" Pipe off Riser in 1st Hole
11:45	—		8.5	3	Plug with 30 sx cement
			5.5	3	Run Pipe in mouse + plug with 20 sx cement
			5.5	3	Run Pipe in 2nd mouse hole + plug with 20 sx cement
					Wash Pumps truck in Reserve Pit



BASICSM
ENERGY SERVICES
PRESSURE PUMPING & WIRELINE

10244 NE Hwy. 61
P.O. Box 8613
Pratt, Kansas 67124
Phone 620-672-1201

MH-50

FIELD SERVICE TICKET
1718 17840 A

DATE _____ TICKET NO. _____

DATE OF JOB 6-19-19		DISTRICT PRATT		NEW WELL <input checked="" type="checkbox"/> OLD WELL <input type="checkbox"/>		PROD <input type="checkbox"/> INJ <input type="checkbox"/> WDW <input type="checkbox"/>		CUSTOMER ORDER NO.:	
CUSTOMER ORCA OPERATING CO.				LEASE SCHOFFNER SWD				WELL NO. 12-1	
ADDRESS				COUNTY RENO		STATE KANSAS			
CITY				STATE		SERVICE CREW CARL, Mc BRAUN, WADE			
AUTHORIZED BY HAROLD WATTS				JOB TYPE: Z-42 PRODUCTION CSG.					
EQUIPMENT#	HRS	EQUIPMENT#	HRS	EQUIPMENT#	HRS	TRUCK CALLED	DATE	AM	TIME
77636-36779	1.25						6-18		
19960-19360	.25						6-18	8:00	PM
							6-19	6:00	AM
							6-19	7:15	AM
							6-19	8:00	AM
						MILES FROM STATION TO WELL	30		

CONTRACT CONDITIONS: (This contract must be signed before the job is commenced or merchandise is delivered).

The undersigned is authorized to execute this contract as an agent of the customer. As such, the undersigned agrees and acknowledges that this contract for services, materials, products, and/or supplies includes all of and only those terms and conditions appearing on the front and back of this document. No additional or substitute terms and/or conditions shall become a part of this contract without the written consent of an officer of Basic Energy Services LP.

SIGNED: *[Signature]*
(WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	\$ AMOUNT
BC103	CLASS H CEMENT	SK	175		6825 00
CC102	CELLOFLAKE	LB	44		175 00
CC105	C-41 P	LB	83		332 00
CC-111	SALT	LB	950		475 00
CC-112	CEMENT FRICTION REDUCER	LB	50		300 00
CC-113	BURSUM	LB	1650		1650 00
CC-187	C-17	LB	91		2184 00
CC-201	BILSONITE	LB	1052		1052 00
CC-151	MUD FLOSH	GAL	1000		1500 00
ME101	LIGHT VEHICLE MILEAGE	MI	400		2000 00
ME102	HEAVY EQUIPMENT MILEAGE	MI	60		288 00
CE504	PULP CONTAINER UTILIZATION	EA	1		250 00
CC5	DEPTH CHARGE	EA	1		2500 00
CE240	BLENDING + MIXING CHARGE	SK	175		245 00
CF104	7" TOP RUBBER PLUG	EA	1		110 00
CF3002	7" BUTRESS FLOAT SHOE	EA	1		1707 26
CF3002	7" BUTRESS FLOAT COLLAR	EA	1		1369 39
CF1652	7" TURBOILLERS	EA	10		1250 00

SUB TOTAL

CHEMICAL / ACID DATA:			

SERVICE & EQUIPMENT	%TAX ON \$	
MATERIALS	%TAX ON \$	
TOTAL		<i>[Signature]</i>

SERVICE REPRESENTATIVE <i>[Signature]</i>	THE ABOVE MATERIAL AND SERVICE ORDERED BY CUSTOMER AND RECEIVED BY: <i>[Signature]</i>
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(WELL OWNER OPERATOR CONTRACTOR OR AGENT)

FIELD SERVICE ORDER NO.

Customer: Orco Operations P. III Lease No. _____ Date: 6-19-2019
 Lease: Schellmer SWD Well # 12-1
 Field Order # _____ Station: Tract H. KS 1718 Casing: 7" Depth: 4340 County: P. Mc State: KANSAS
 Type Job: 1. Production Control Formation _____ Legal Description: 12-25-9W

PIPE DATA		PERFORATING DATA		FLUID USED		TREATMENT RESUME		
Casing Size	Tubing Size	Shots/Ft.		Acid		RATE	PRESS	ISIP
Depth <u>4340</u>	Depth	From	To	Pre Pad		Max		5 Min.
Volume	Volume	From	To	Pad		Min		10 Min.
Max Press <u>1900</u>	Max Press	From	To	Frac		Avg		15 Min.
Well Connection <u>Low 1100000</u>	Annulus Vol.	From	To			HHP Used		Annulus Pressure
Plug Depth <u>4340</u>	Packer Depth	From	To	Flush		Gas Volume		Total Load

Customer Representative _____ Station Manager: meto. Workman Treater: Carl Fritzsche

Service Units	19756	19774	19966	19860					
Driver Names	<u>Mike</u>	<u>McGraw</u>	<u>Wince</u>	<u>Brown</u>					

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
					Truck on location 8:00 AM - 6-18-19
					new fluid equipment on location 12:00 AM 6-19-19
5:15 AM					Run 4340 7 P. Mc 26" casing
					Break circulation with rig
					circulate for
6:00 AM	350		24	5	start 1100 gal wash flush
6:05 AM	400		48	5	start 175 ex class 4 + additives
6:27					stop pumps + Release plug
6:35	100			3	start Displacement
	200			5	start Rate + measure
	400		115	5	see lift measure
	450		120	4.5	slow Rate
	650				slow Rate + measure + measure
	850		130	4	slow Rate
	1250		155	3	slow Rate to Brown plug
7:15 AM	1900		162	3	Brown Plug
					Release plug + fluid 1100



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ENERGY SERVICES
PRESSURE PUMPING & WIRELINE

10244 NE Hwy. 61
P.O. Box 8613
Pratt, Kansas 67124
Phone 620-672-1201

FIELD SERVICE TICKET

1718 17924 A

Total Man hours 48

DATE _____ TICKET NO. _____

DATE OF JOB: 6-13-14	DISTRICT: Pratt, KS #1718	NEW WELL <input checked="" type="checkbox"/>	OLD WELL <input type="checkbox"/>	PROD <input type="checkbox"/>	INJ <input type="checkbox"/>	WDW <input type="checkbox"/>	CUSTOMER ORDER NO.:	
CUSTOMER: ORCA OPERATING Co. LLC		LEASE: Schaffner					WELL NO. 12-1	
ADDRESS:		COUNTY: Reno			STATE: KS.			
CITY:		STATE:		SERVICE CREW: Bill B. Eddie M.				
AUTHORIZED BY:				JOB TYPE: 9 7/8 surface Z-42				
EQUIPMENT#	HRS	EQUIPMENT#	HRS	EQUIPMENT#	HRS	TRUCK CALLED 6-12-14 DATE AM PM TIME		
19980-20920	1.5					ARRIVED AT JOB AM PM 3:00		
19959-19918	.75					START OPERATION AM PM 7:00		
33708-73768	.75					FINISH OPERATION AM PM 11:35		
						RELEASED AM PM 12:55		
						MILES FROM STATION TO WELL AM PM 1:30		
						30		

CONTRACT CONDITIONS: (This contract must be signed before the job is commenced or merchandise is delivered).

The undersigned is authorized to execute this contract as an agent of the customer. As such, the undersigned agrees and acknowledges that this contract for services, materials, products, and/or supplies includes all of and only those terms and conditions appearing on the front and back of this document. No additional or substitute terms and/or conditions shall become a part of this contract without the written consent of an officer of Basic Energy Services LP.

SIGNED: *[Signature]*
(WELL OWNER, OPERATOR, CONTRACTOR OR AGENT)

ITEM/PRICE REF. NO.	MATERIAL, EQUIPMENT AND SERVICES USED	UNIT	QUANTITY	UNIT PRICE	\$ AMOUNT
BC 118	A-CON Blend	SX	350		17,500 -
BC 160	Class A Cement	SX	200		6200 -
CC 102	Celloflake	lb	138		552 -
CC 109	Calcium chloride	lb	1363		1363 -
CC 111	SALT	lb	1110		555 -
CC 131	SINGAL	lb	200		1000 -
ME 101	light vehicle	ME	30		150 -
ME 102	HEAVY VEHICLE MILEAGE	ME	90		720 -
CF 504	PLUG CONTAINER UTILIZATION CH	EA	1		250 -
CF 2	DEPTH CHARGE 1001'-2000'	HR	1		1500 -
CF 240	BLENDING + MIXING SERVICE CHARGE	SX	550		770 -
CF 804	9 7/8 FLOAT SHOE	EA	1		650 -
CF 904	9 5/8 FLOAT COLLAR	EA	1		1000 -
CF 1904	9 5/8 BASKET	EA	1		340 -
CF 1754	9 5/8 Centralizers	EA	5		475 -
CF 106	9 7/8 TORRIFIED PLUG	EA	1		260 -
DE 143	SERVICE SUPERVISOR CHARGE	EA	1		75 -
DE 144	DRIVER CHARGE	EA	3		105 -
				SUB TOTAL	33,465

CHEMICAL / ACID DATA:			

SERVICE & EQUIPMENT	%TAX ON \$	
MATERIALS	%TAX ON \$	
TOTAL		DLS 13,161 15

SERVICE REPRESENTATIVE: *[Signature]*

THE ABOVE MATERIAL AND SERVICE ORDERED BY CUSTOMER AND RECEIVED BY: *[Signature]*

(WELL OWNER OPERATOR CONTRACTOR OR AGENT)

FIELD SERVICE ORDER NO.

BASIC

energy services, L.P.

TREATMENT REPORT

Customer ORCA OPERATIONS CO.	Lease No. SCHOFFNER	Date 6-12-2019
Lease SCHOFFNER	Well # 12-1	
Field Order #	Station PRATT KS # 1718	Casing 9/8
	Depth	County RENO
Type Job 9 5/8 surface	Formation	State KANSAS
		Legal Description

PIPE DATA		PERFORATING DATA		FLUID USED		TREATMENT RESUME		
Casing Size	Tubing Size	Shots/Ft		Acid	RATE	PRESS	ISIP	
1671	1671	From	To	Pre Pad	Max		5 Min.	
123	Volume	From	To	Pad	Min		10 Min.	
Max Press	Max Press	From	To	Frac	Avg		15 Min.	
Well Connection HIM	Annulus Vol.	From	To		HHP Used		Annulus Pressure	
Plug Depth 1627	Packer Depth	From	To	Flush	Gas Volume		Total Load	

Customer Representative	Station Manager JUSTIN WESTERHOLM	Treater ADRI BAIRING
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Service Units	84980	20920	19959	19918	33708	73765			
Driver Names									

Time	Casing Pressure	Tubing Pressure	Bbls. Pumped	Rate	Service Log
10:50 AM					ON LOC + RIG UP
					RUN 1671 9 5/8 CASING
					POB
					BREAK CIRCULATION
					RIG UP TO CONSIST
11:35 AM			5	4	START FRESH WATER
11:38 AM			139	4	START LEAD CEMENT
12:10 AM			42.75	5	START TAIL CEMENT
12:20 AM					CEMENT TAIL STOP LEADS
					RELEASE PLUG
12:25 AM			10	3	START DISPLACEMENT THEN INCS
				5	STEADY RATE + PRESSURE
	500		110	3.5	SLOW RATE
12:55 AM	1200		118	2.5	SLOW RATE + LEAD PLUG
	1200		123		RELEASE PRESSURE + TAIL HEAD
					Circulate 125.5 x 1. Pit

Koda Services, Inc.

INVOICE



Conductor and Rat Hole Drilling, Landfill Gas Drilling and Well Construction Nationwide

Date	Invoice #
5/8/2019	13074

Bill To
ORCA Operating Company, LLC 427 S. Boston Ave., Suite 400 Tulsa, OK 74103

MAY 14 2019
10 yds @ 27 cu ft / yd
→ 270 cu ft of cmt which
is @ 1 SK / cu ft or 270 Sacks

Legal Description	Ordered By	Terms	Field Ticket	Lease Name	Drill Rig
NE of Langdon, KS	Ron Newberry	Net 30	9535	Shoffner SWD 12-1	Duke 9
Item	Quantity	Description		Rate	Amount
Conductor	125	Drilled 125' of 26" hole for conductor		35.00	4,375.00
16" pipe	124	Furnished 124' of 16" conductor pipe		35.75	4,433.00T
Mouse	50	Drilled 50' of 20" Mouse hole		27.50	1,375.00
15" X 50'	1	Provide 15" mouse hole and rathole shucks		1,650.00	1,650.00T
Ream Hole	5	Drill 65" Cellar hole		110.00	550.00
60" X 5'	1	Furnished 5' X 5' tinhorn		550.00	550.00T
Dirt Removal	5	Provided Labor and Equipment for dirt removal and cleanup		71.50	357.50
Placement	1	Equipment and time to run Conductor (120-160)		1,925.00	1,925.00
CS4	14	Vacuum Truck		110.00	1,540.00
Cover Plate	1	Lid for conductor		44.00	44.00T
Deliver Grout	1	Deliver grout to location		385.00	385.00
Grout	10	Cement for Conductor — see Above		220.00	2,200.00T
Barrier Fence	1	Safety fence to surround hole when finished		88.00	88.00T
Equipment	1	Cement Pump		550.00	550.00
Discount of 45% has been applied to rate prices. Invoice total \$38,000.00-17,100.00 (45% discount) =\$20,900.00 before taxes					
<p>Thank you for your business.</p> <p><i>Ron Newberry</i> 5-13-19</p>				<p>Shoffner SWD 1-12 AFE Code 101 112</p> <p>5-14 5114</p>	
				Subtotal	\$20,022.50
				Sales Tax (8.0%)	\$717.20
				Total	\$20,739.70

500040-112-20,739.70