#### KOLAR Document ID: 1693103

Confident	tiality Re	equested:
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
				U LLAGE

OPERATOR: License #	API No.:
Name:	Spot Description:
Address 1:	
Address 2:	Feet from Dorth / South Line of Section
City: State: Zip:+	Feet from East / West Line of Section
Contact Person:	Footages Calculated from Nearest Outside Section Corner:
Phone: ()	
CONTRACTOR: License #	GPS Location: Lat:, Long:
Name:	(e.g. xx.xxxx) (e.gxxx.xxxxx)
Wellsite Geologist:	Datum: NAD27 NAD83 WGS84
Purchaser:	County:
Designate Type of Completion:	Lease Name: Well #:
New Well Re-Entry Workover	Field Name:
	Producing Formation:
	Elevation: Ground: Kelly Bushing:
	Total Vertical Depth: Plug Back Total Depth:
CM (Coal Bed Methane)	Amount of Surface Pipe Set and Cemented at: Feet
Cathodic Other (Core, Expl., etc.):	Multiple Stage Cementing Collar Used?
If Workover/Re-entry: Old Well Info as follows:	If yes, show depth set: Feet
Operator:	If Alternate II completion, cement circulated from:
Well Name:	feet depth to:w/sx cmt.
Original Comp. Date: Original Total Depth:	
Deepening Re-perf. Conv. to EOR Conv. to SWD	Drilling Fluid Management Plan
Plug Back Liner Conv. to GSW Conv. to Producer	(Data must be collected from the Reserve Pit)
	Chloride content: ppm Fluid volume: bbls
Commingled Permit #:	Dewatering method used:
Dual Completion Permit #:      SWD Permit #:	
	Location of fluid disposal if hauled offsite:
EOR Permit #:      GSW Permit #:	Operator Name:
	Lease Name: License #:
Spud Date or Date Reached TD Completion Date or	Quarter Sec TwpS. R East West
Recompletion Date Recompletion Date Recompletion Date	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:

#### KOLAR Document ID: 1693103

Operator Nar	ne:			Lease Name:	Well #:
Sec	Twp	S. R	East West	County:	

Page Two

**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	۱ []	⁄es 🗌 No		L	.og Fo	ormation (To	p), Depth an	d Datum	Sample	
(Attach Additional Sh					Nam	е			Тор	Datum
Samples Sent to Geolog Cores Taken Electric Log Run Geologist Report / Mud List All E. Logs Run:		∕es ∐No ∕es ∏No ∕es ∏No ∕es ∏No								
		Rep	CASING ort all strings set-o	RECORD [	Ne			c.		
Purpose of String	Size Hole Drilled		ze Casing et (In O.D.)	Weight Lbs. / Ft.		Settir Dept		Type of Cement	# Sacks Used	Type and Percent Additives
			ADDITIONAL	CEMENTING	/ SQL	JEEZE REG	CORD			
Purpose: Depth Perforate Protect Casing		Тур	e of Cement	# Sacks Use	s Used			Type and Pe	ercent Additives	
Plug Back TD Plug Off Zone										
<ol> <li>Did you perform a hydra</li> <li>Does the volume of the</li> <li>Was the hydraulic fractular</li> </ol>	total base fluid of the	hydraulic fr	acturing treatment		-	ons?	res	No <i>(If No, ski</i> p	o questions 2 an o question 3) out Page Three (	
Date of first Production/Inj Injection:	ection or Resumed Pr	oduction/	Producing Meth	nod:		Gas Lift	Other (	Explain)		
Estimated Production Per 24 Hours	Oil	Bbls.	Gas	Mcf	Water Bbls.				as-Oil Ratio	Gravity
DISPOSITION			_						PRODUCTIC Top	ON INTERVAL: Bottom
Vented Sold	Used on Lease		Open Hole			Comp. ACO-5)	Comming (Submit AC			
	foration Perfor Top Bott		Bridge Plug Type	Bridge Plug Set At					enting Squeeze of Material Used)	
TUBING RECORD:	Size:	Set At:		Packer At:						

Form	ACO1 - Well Completion
Operator	Quail Oil & Gas, LC
Well Name	KELLER 1-31
Doc ID	1693103

## Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement		Type and Percent Additives
Surface	12.250	8.625	28	320	Class A		3%CC, 2% Gel
Production	7.87	5.5	15.5	4818	HH Long	400	Gasbloc

Conservation Division 266 N. Main St., Ste. 220 Wichita, KS 67202-1513

Susan K. Duffy, Chair Dwight D. Keen, Commissioner Andrew J. French, Commissioner

February 17, 2023

Wray Valentine Quail Oil & Gas, LC 2005 North Taylor Avenue PO BOX K GARDEN CITY, KS 67846-9633

Re: ACO-1 API 15-007-24441-00-00 KELLER 1-31 SE/4 Sec.31-30S-12W Barber County, Kansas

Dear Wray Valentine:

K.A.R. 82-3-107 provides for all completion information to be filed within 120 days of the spud date. Subsection(e)(2) of that regulation states "All rights to confidentiality shall be lost if the filings are not timely."

The above referenced well was spudded on 09/26/2022 and the ACO-1 was received on February 16, 2023 (not within the 120 days timely requirement).

Therefore, your request for confidential treatment of data contained within the ACO-1 filing cannot be granted at this time.

If you should have any questions, please do not hesitate to contact me at (316)337-6200.

Sincerely,

**Production Department** 



Phone: 316-337-6200 Fax: 316-337-6211 http://kcc.ks.gov/

Laura Kelly, Governor

David A. Barker 🇺 CONSULTING GEOLOGIST Scale 1:240 (5"=100') Imperial Measured Depth Log Well Name: 1-31 Keller Well Id: 15-007-24441

Location: 31-T30S-R12W License Number: Spud Date: 9/26/2022 Surface Coordinates: 1845' FSL & 445' FWL

Drilling Completed: 10/07/2022

Region: Barber County, Kansas

Bottom Hole Coordinates: Ground Elevation (ft):				K.B. Elevation (ft):	
Logged Interval (ft):	surface	To:	TD	Total Depth (ft):	4844
Formation:	Arbuckle				
Type of Drilling Fluid:	chemical				
		ted by	WellSig	ght LogViewer from WellSi	ght Systems 1-800-447-1534 www.WellSight.com

#### **OPERATOR**

Company: Ouail Oil & Gas Address: PO Box K Garden City, KS 67648

#### GEOLOGIST

Name: David A. Barker Company:

Address: 212 N. Market, Suite# 320 Wichita, Kansas 67202 (316) 259-4294, 2 Barker@sbcglobal.net

Contractor

Fossile Drilling Rig #3, 10213 Blue Stem Blvd, Pratt, KS, 67124

**Daily Status** 

9-26-2022: Spud well at 11:00 A.M.,

drill to 321' run 7 JTS 8 5/8", set at 311" cement with 225 SXS 60/40, plug down at 5:30 P.M. wait on cement,

9-27-2022: Trip in hole with Smith M1616, PDC bit and drill cement at 1:30 A.M. then drill to the morning depth of 680' 9-28-2022: morning depth of 2380', survey's@: 946' 1/8 deg., 1454' 1/4 deg., 1962 3/4 deg.

9-29-2022: Morning depth 2817', DST #1 interval 2747 to 2817', Survey @: 2471' .75 deg., 2990' 1/2 deg.

9-30-2022: Morning depth: 3268',, DST #2 2966 to 2990', deg., 2990' 1/2 deg.

10-01-2022: Morning depth 3633' DST #3. 3566 to 3633, Survey @ 3633' 11/2 deg.

10-02-2022: Morning depth 3900', DST #6 3828 to 3867' Survey @ 3867 11/2 deg.

10-03-2022: Morning depth: 4084', DST #5 3927 to 3970', Survey @ 3970 13/4 deg.

10-04-2022: Morning depth: 4368', DST #6 4300 to 4368', Survey @ 4084 1 1/2 deg., 4242 2 deg., 4322 1 3/4 deg., 4368 1 1/2 deg.,

10-05-2022: Morning depth 4577', Dst# 7 4546 to 4577', Survey's @ 4464' 1 3/4 deg., 4577' 1 Deg.,

10-06-2022: Morning depth of 4624',

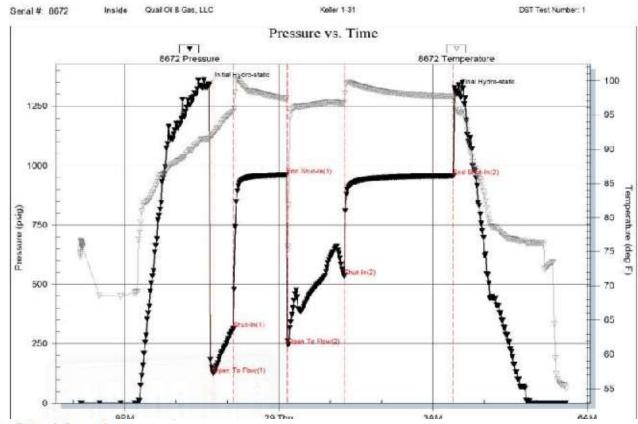
10-07-2022: Morning depth of 4784' DST # 8 4671 to 4717, Survey@ 4717' 1 1/4 deg.,drill to total depth of 4844 and run Eloas.

10-08-2022: Morning depth: 4844, waiting on casing crew.

10-09-2022: prepare to run casing, lay down drill pipe.

10-10-2022: Run production casing 5 1/2" J55 15.5# casing, 117 jts, set at a depth of 4830' with 400 sx; 100 sx on the bottom and 300 sx on the top. rig down the rig.

DST #1, 2747 to 2817, Indian Cave SD: IF: 30 min: BOB 15 sec, GTS 25 min, ISI: 60 min, blow back 30 sec, 4.5 inches, FF: 60 min., BOB GTS ASAO, strong building blow, flowed water in 50 minutes, FSI: 120 min., blow back 1 min. 3.5 inches, REC 880 feet og gassy water 10% gas 90% water, chlorides 44,000 PPM, IHP 1341 to 1312#, IFP 124 to 314#, FFP 245 to 534#, BHP 961 to 957#, BHT 100 deg.



**Gas Rates Information** 

 Temperature:
 59 (deg F)

 Relative Density:
 0.65

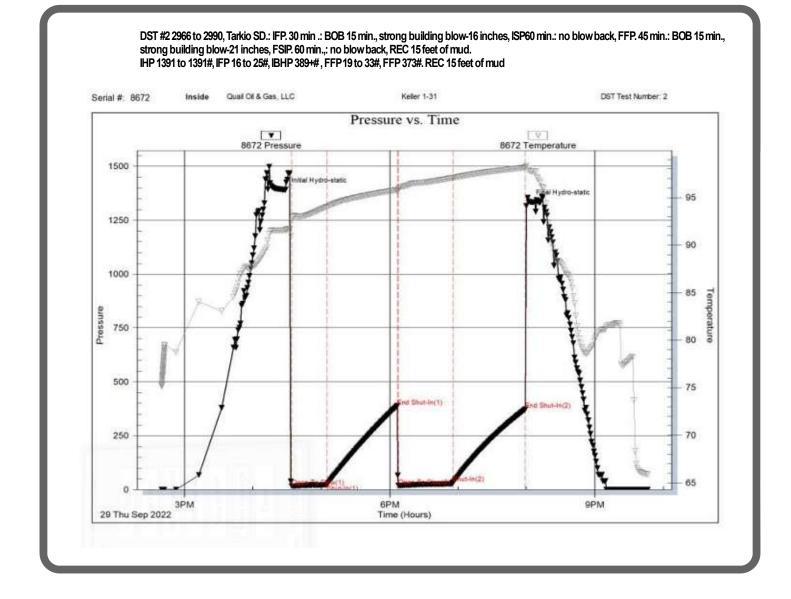
 Z Factor:
 0.8

#### Gas Rates Table

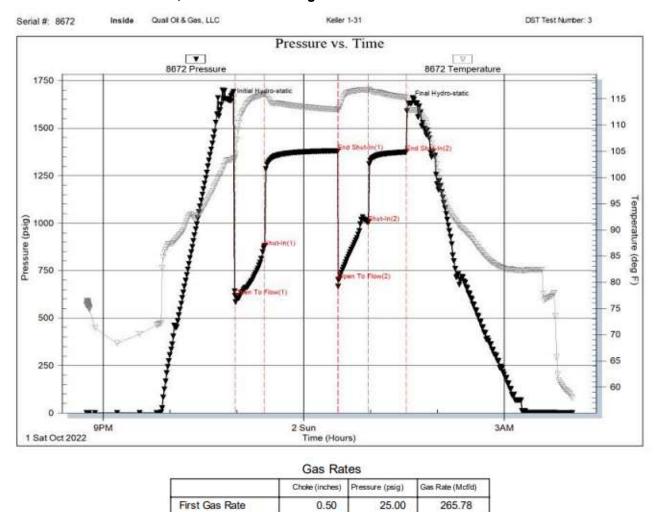
Flow Period	Elapsed Time	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
2	10	0.38	42.00	206.61
2	20	0.38	55.00	254.23
2	30	0.38	69.00	305.51
2	40	0.38	81.00	349.47
2	50	0.38	182.00	719.46

#### Remarks

At the 1-31 Keller location production casing was set to a depth of 4830 to further test through pipe the prospective productive zones. A list of the prospective zones in 1-31 Keller location would include the following: Indian Cave Sandstone, Bern LS from 3130 to 3154, Upper Lecompton LS, Lower Douglas Sandstone, Upper Lansing "B" zone, and the Arbuckle dolomite. All prospective productive zones were circulated and or Drill stem tested at this location. I especially liked the upper Mississippain sample shows-interval 4347 to 4376 at this location. These samples were Chert: even to to heavy stained with slight show of free oil, fair to good even fluoresence. abundant edge stain and stained fractures. This interval was covered by DST #6. This DST covered the Upper Mississsippian and the Marmaton but these two zones proved that these two zones were very tight. DST # 7 across the upper Viola formation also proved this interval to be very tight but with building bottom hole pressures from 966 to 1266#. It is felt that this location. Keller 1-31, is close to a productive Viola producer because of DST #7 and the sample shows at this location. DST #8 tested the Upper Simpson Sand and recovered over 3000 feet of slightly gassey salt water. This is a tremendous strong water drive reservoir with the final flow pressures approaching the final bottom hole pressures. The recovered water from DST #8 had a very strong petroleum smell to it not unlike the water from a producing Simpson Sand oil well. Further drilling should prove to find a productive Simpson Sand well or wells in this area. The top of the Arbuckle carried a oil show in the wet and dry samples. It is very unusal for the Arbuckle to carry a show in this area. This zone should be perforated and tested through pipe. Thank you David Barker

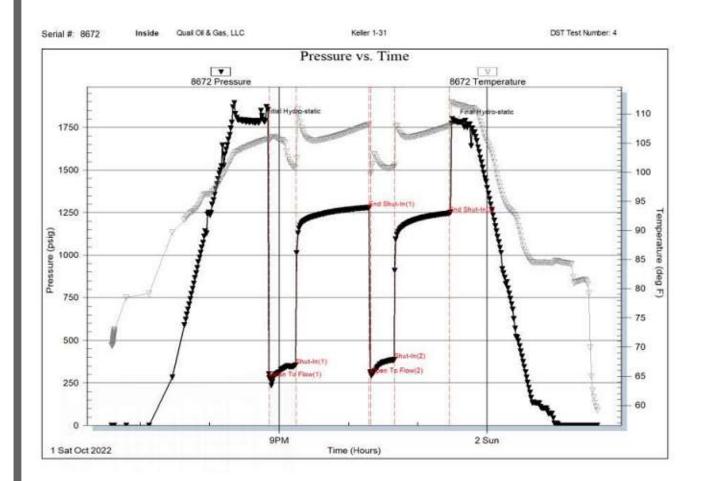


DST #3 3566 to 3633, Lecompton LS. IFP 30 min.: BOB, ASAO, GTS 5 min., gas gauge 275 MCFG before flowing water in 25 min., ISIP 60 min.: blow back 15 sec., FFP 30 min., BOB 15 sec., flowed water 20 min., FSP 30 min., blow never died. REC 1350 feet of gassy water, 10% gas and 90% water, tritrate water chlorides 111, 000 PPM. BHT 116 deg.



Last Gas Rate

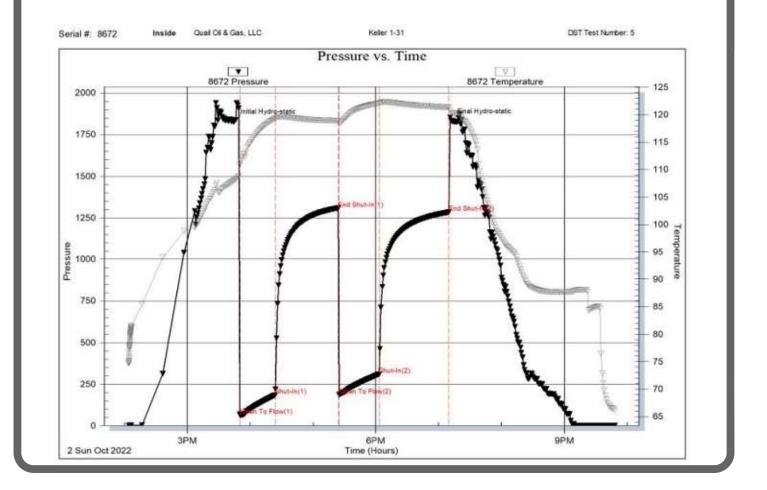
DST #4, 3828 to 3867, Lower Douglas Sand: IFP, 30 min.: BOBASAO GTS in 3 min., strong building blow, ISIP, 60 min.: blow back 30 sec. 2 inches, FFP 20 min.: BOB GTS ASAO, strong building blow, FSIP45 min.: blow back 30 sec. 1.3 inches. REC 244 gasy water (muddy), 10% gas 60% water and 30% mud, IHP 1788#, IFP 280 to 354#, IBHP 1280#, FFP302 to 386#, FBHP 1247#, FHP 1784#. Tritrate recovered water 68,000 PPM chlorides

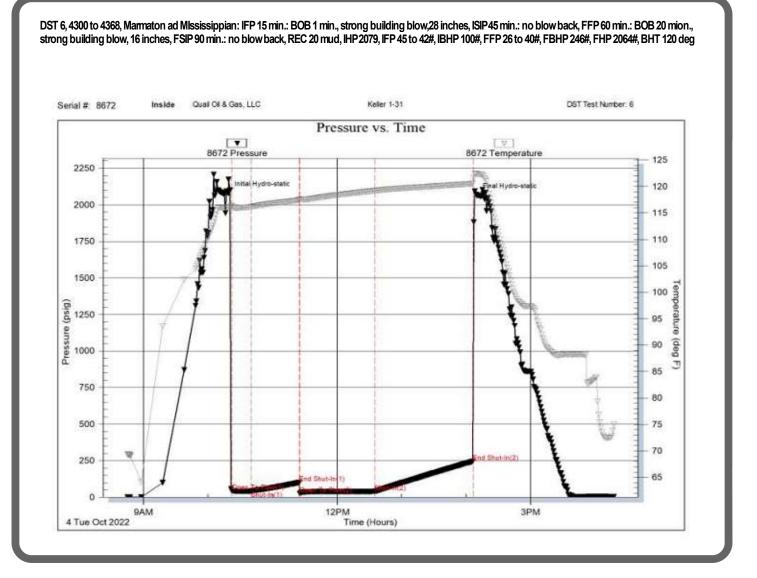


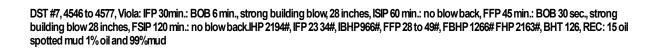
Gas Rates

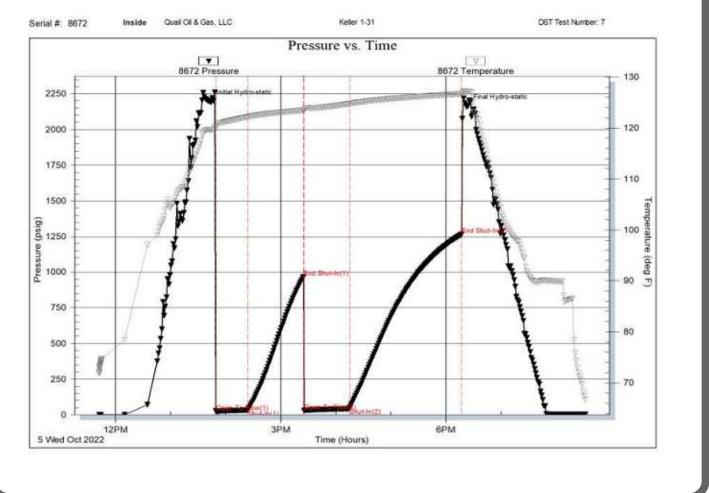
	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)
First Gas Rate	0.50	128.00	960.59
Last Gas Rate	0.50	173.00	1264.14
Max. Gas Rate	0.50	173.00	1264.14

DST #5, 3927 to 3970, Upper Lansing: IFP 30 min.: BOB 1 min. strong bluilding blow, 284 inches, ISIP60 min.: blow back 15 sec. 2.6 inches, FFP 30 min.: BOB 2 min., strong building blow, 284 inches, gas to surface TSTM, FSIP 60 minuites, flow back 1.5 min., 1.4 inches, REC: GIP, 630 feet of gassy water, 5% gas 95% water, 126 feet of gassy oil cut watery mud, 10% gas, 5% oil and 5% water and 80% mud, Tritrate recovered water 111, 000 ppm Chlorides, IHP 1831#, IFP 64 to 184#, IBHP 1308#, FFP 185 to 309#, FBHP 1284#, FHP1833#, BHT 121 deg.

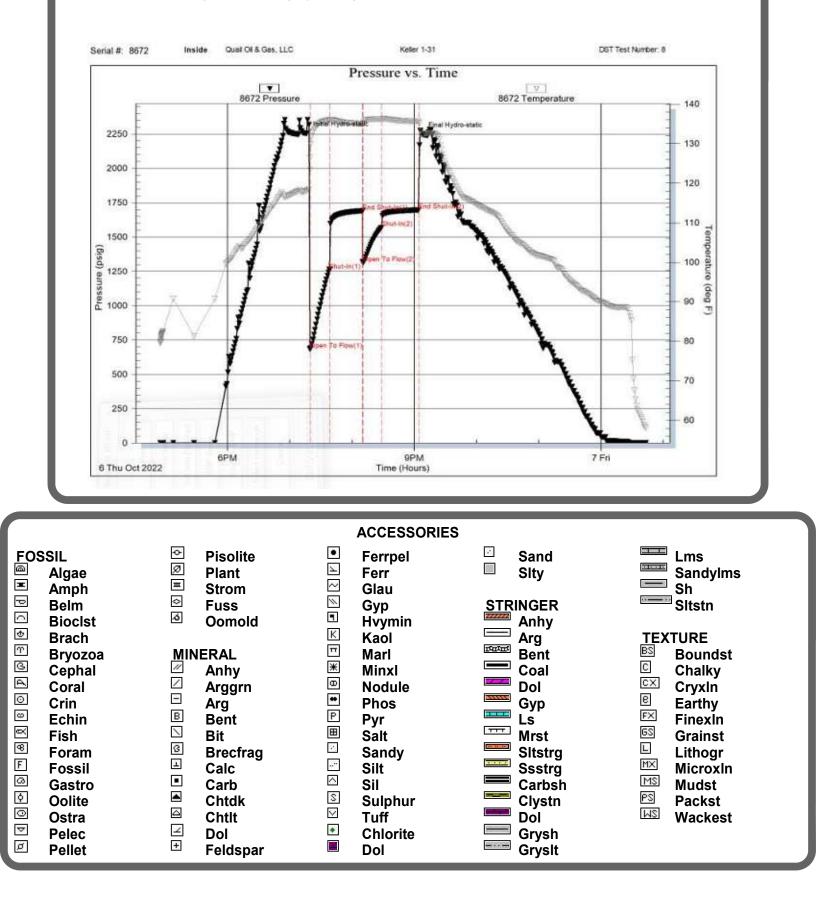


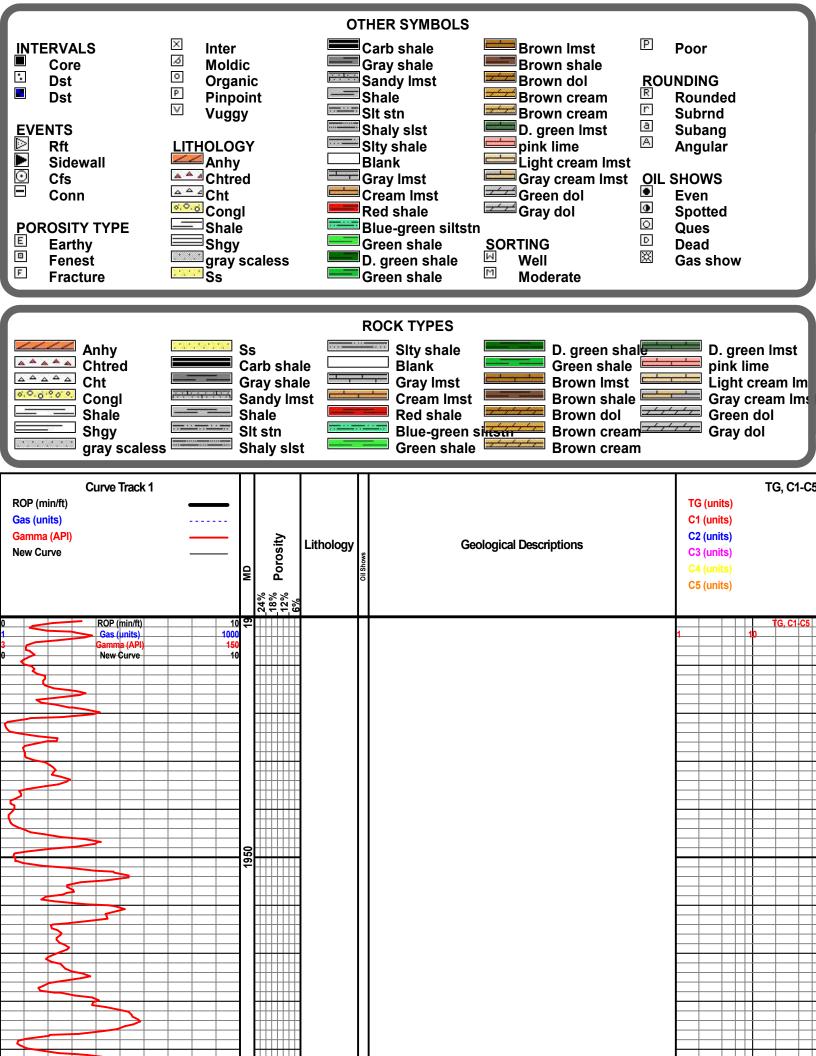


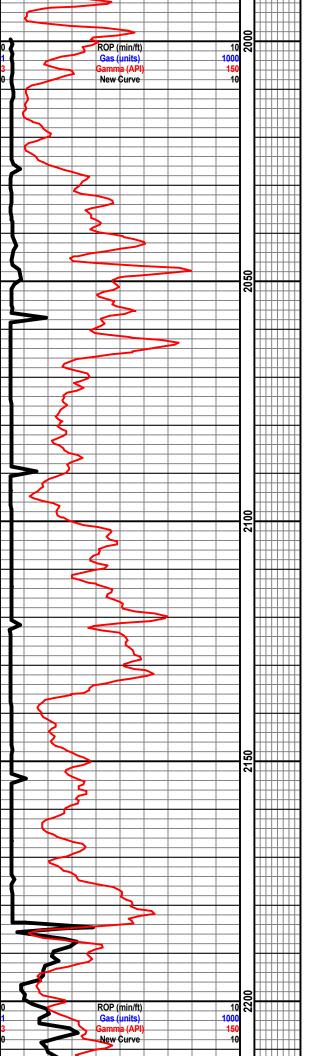


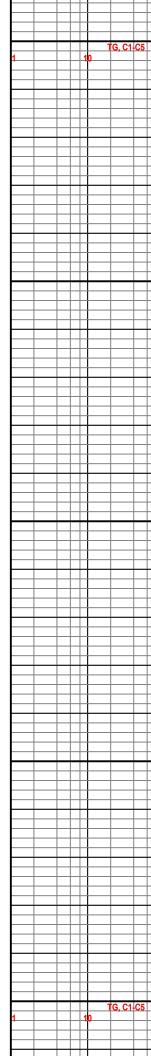


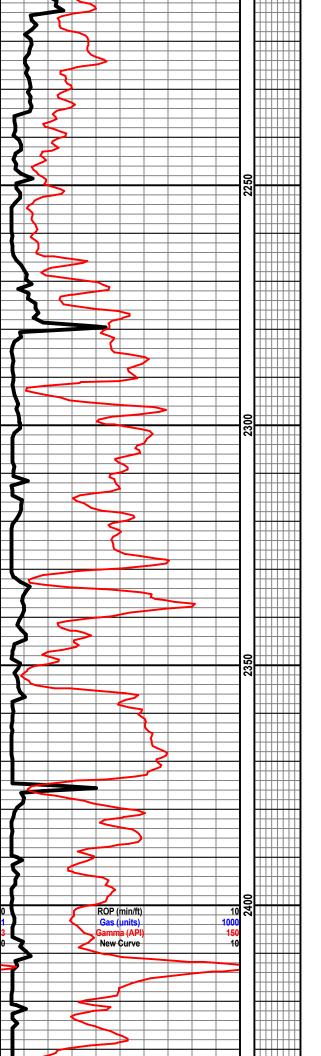
DST #8, 4671 to 4717, Simpson Sand: IFP 15 min.: BOB 30 sec, strong building blow 4580 inches, ISIP 30 min.: blow back 30 sec. 6 inches, FFP 15 min.: BOB ASAO, strong building blow 249 inches, FSIP 30 min.: no blow back., IHP 2254#, IFP 682 to 1261#, IBHP1691#, FHP 2245#, FFP 1313 to 1571#, FBP 169+7#, FFHP 2245#, BHT 136 deg., REC: 3020 feet of gassy water 5% gas 95% water, tritrate chlorides for the recovered water 59,000 PPM

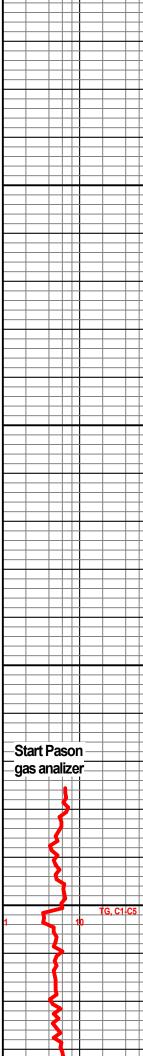


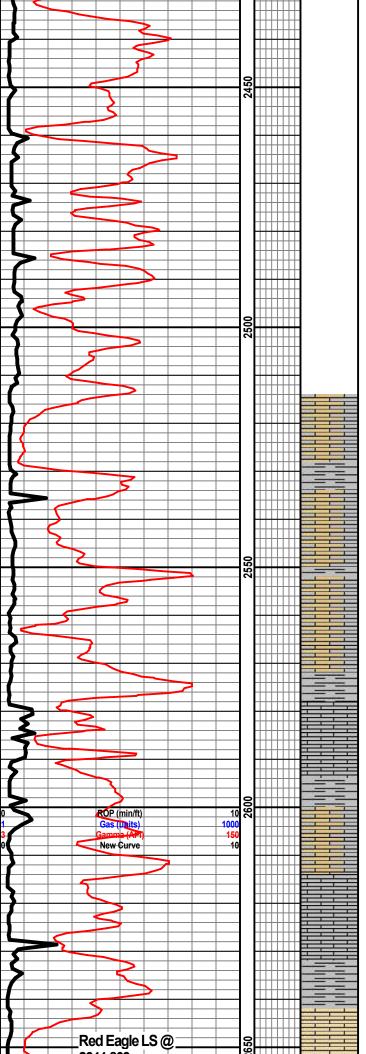












LS: white, finexyln, friable, Shale: gray LS: buff, finexyln

Shale: Dark gray, dense, LS: gray/brown, fusilinids fragments, LS: gray, microxyln, with fossile fragments.

Shale: dark gray, massive, LS: gray/buff, microxyln, dense, blocky, cryptoxyln, no show.

2569 Shale: dark gray, massive, LS: gray/buff, microxyln, dense, blocky, cryptoxyln no show.

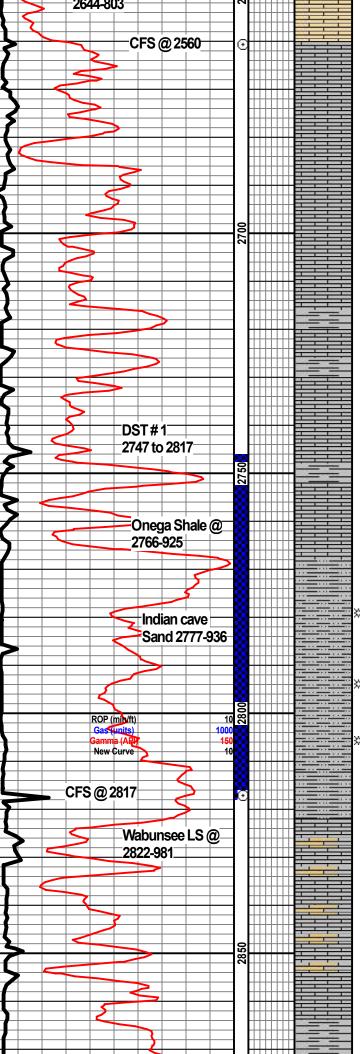
2598 Shale: gray LS: gray, microxyln, dense, LS: buff/blond, finexyln, cryptoxyln, streaks no visable porosity

2623 LS: dark gray/brown, finexyln, dense, mottled, Chert: light gray, LS: gray, microxyln, dense.

2660 20 min.: LS: dense, no show, LS: brown to gray, microxyln, dense, poor interxyln porosity

2660 30 min.:LS: buff, microxyln, scattered slight





visable porosity, LS: dirty gray, finexyln, poor interxyln porosity, Shale: gray, massive, no sample odor, no fluoresence, no gas increase.

2721 LS: gray, finexyln mudstone, no visable porosity, LS: brown/gray, microxyln, very dense, Shale: gray/green.

2755 Shale: light green/waxey, Shale: gray, blocky, LS: dirty gray, microxyln, no visable porosity, dense, cream/gray in part.

2786 Shale: gray, Shale: gray/green, Shale: dark gray, LS: dark dirty gray, fossiliferous, microxyln, dense, mottled, lighter in part

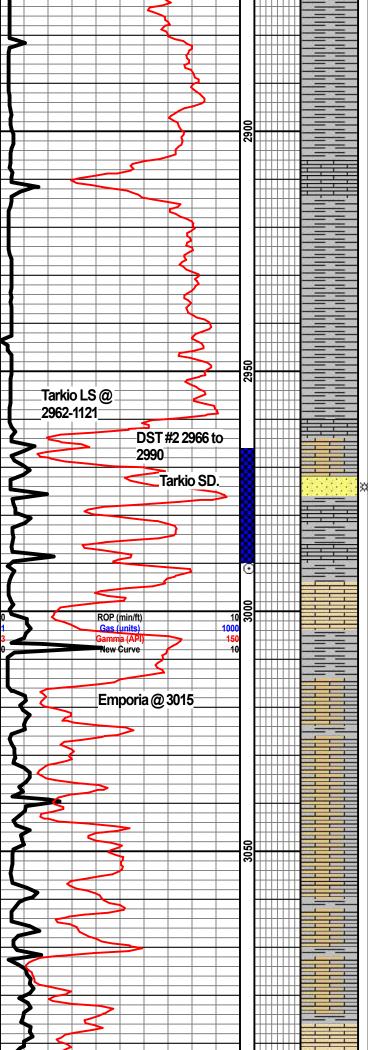
2817 LS: gray/brown, finexyln, poor interxyln porosity, mottled, Shale: gray to medium gray

2817 20 min: No odor, SD. STN: fine grain, micacous, random gas bubbles, no fluoresence, friable

2817 40 min: SD. STN: light gray, fine grain, micacous, random gas bubbles, no florescence, friable, with black shale streaks

2881 flood of LS: gray, to dark gray to medium gray, and or light cream/gray, friable.





2912 LS: LS: gray, to dark gray to medium gray, and or light cream/gray, friable. Shale gray massive, dense. LS: dark gray, dense, microxyln, dense, plattey

2944 Shale gray, silty, gray to dark gray, LS: dark gray/brown, micoxyln, wakestone, dense, platey

Shale: gray

2990 LS: gray, microxyln, dense, no viable porosity, LS: buff, microxyln slight mottled, random pinpoint porosity, poor interxyln porosity, no show, Shale: gray, dense

2992 20 min: Shale: dark gray, dense blocky, LS: grary, microxyln, dense, LS: cream to buff, slight moldic porosity, poor internxyln porosity, Siltstone, light gray, micaceous, platey,

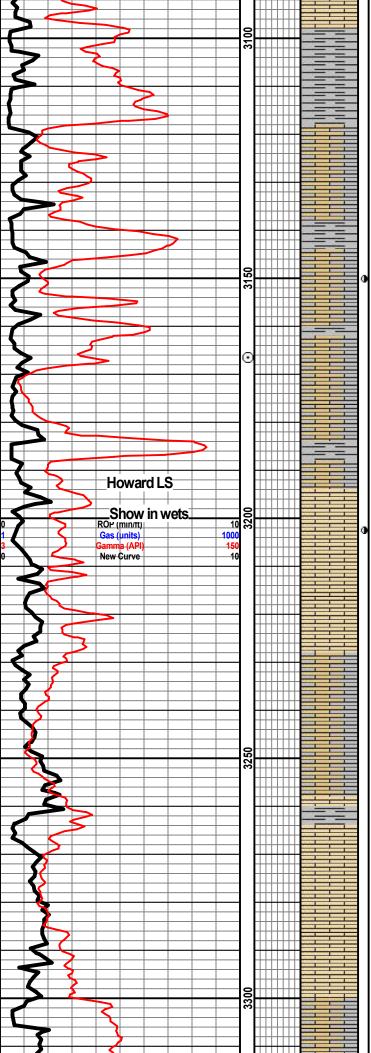
2992 40 min: SD. STN/Siltstone: light gray, fine grain, small amount of chlorite, friable in part, scattered gas bubbles when chrushed, micaceous, shalely in part, poor intergrainular porosity in part.

3039 LS: cream, finxlyn, no visable porosity, Shale: gray,

3071: LS: gray/cream, finexyln, no visable porosity, LS: dark brown, finexyln, mottled, Shale: gray to gray/green, mottled in part.

3103 LS: brown, micoxyln, dense, LS: gray, medium to finexyln, dense, no visable porosity, LS: cream, cryptoxyln, no visable porosity, Shale: gray, blocky





3134 LS: cream to buff, finexyln, mudstone, with fossile fragments, no visable porosity, Shale: gray to dark gray, LS: white/cream, mudstone, wtih bright florescence,

3166 LS: buff to gray/ buff, finexyln, fossiliferous packstone in part, no visable porosity to very slight visable porosity, Shale: gray, LS: light gray, microxyln, dense, no show.

3166 20 min.: LS: cream/gray, finexyln, poor interxyln porosity, 1 piece with medium fluoresence, slight stain, no stain in the dry samples, scattered LS: cream, finexyln, pinpoint porosity, questionable stain, no odor from the sample. LS: gray slight visable porosity, with even brown stain, no show of free oil dull florescence.

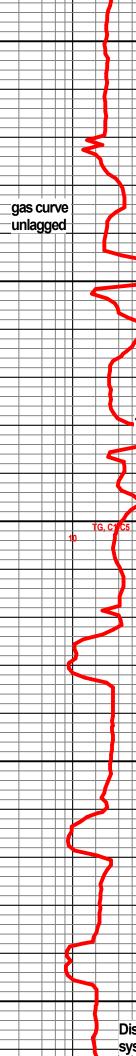
3166 40 min.: LS: gray, slight visable porosity, broke fair show of free oil, LS: cream, fair pin point moldic porosity, fair interxyln porosity, no stain in dries, 1 piece with lazey oil show, fossile moldic porosity

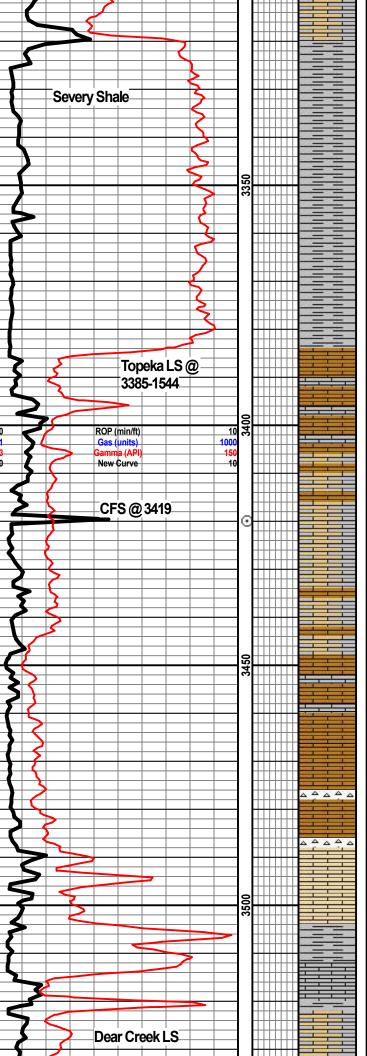
3228: LS: fine grain, slight visable porosity, fair stain, Shale: gray, with LS: white to off white, mudstone, scattered slight visable porosity, firm poor interxyIn porosity, brecciated in part.

3261: LS: gray/brown, micoxyln, dense, LS: cream/buff, finexyln, no visable porosity, poor interxyln porosity, no show, no florescence, mottled in part, Shale: gray

3293: LS: cream to gray/cream, fienxlyln, poor interxyln porosity, 1 piece of oolitic packstone, fair visable porosity, no show, no florescence. LS: cream/gray/buff, finexlyln, mudstone, Shale: gray

3324 LS: gray to cream/gray, microxyln, no visable porosity, LS: light brown, microxyln, fossiliferous





fragments, no visable porosity, Shale: gray

Shale: gray, sample mostly sluff

Shale: gray,silty, LS: brown, microxyln, dense-sluff

3387 Shale: gray, silty, LS: dark brown, platey, microxyln, dense

3419 Shale: gray, silty, LS: brown, microxyln, dense

3419 20 min: Shale: gray, silty, LS: brownish gray, mostled no visable porosity, poor interxyln porosity, dense, no show

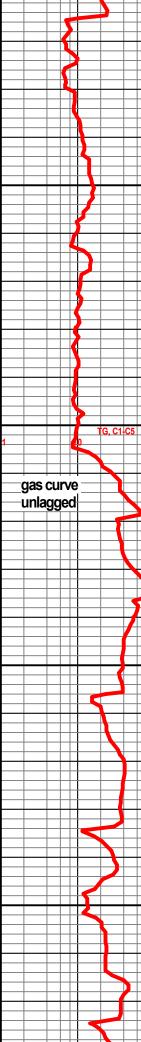
3451 LS: gray/cream, finexyln, subchky, mottled in part, Shale: gray, LS: brown, microxyln, dense

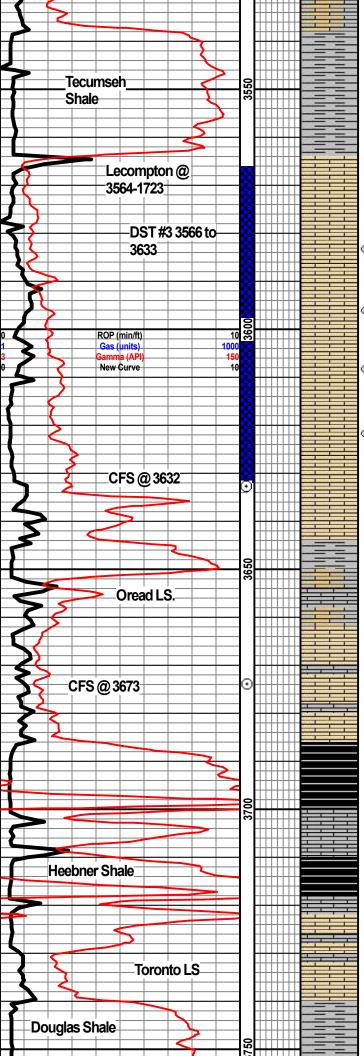
3482: LS: brown to dark gray/brown, blocky, microxyln, dense no visable porosity, streaks of cryptoxyln.

3500 LS: brown, finexyln, friable, fair interxyln porosity, Chert: brownish/gray, mottled, LS: brown, microxyln, very dense.

3520 LS: white, chky, LS: cream to cream/brown, microxyln, no visable porosity, streaks of cryptoxyln, no show

3540 LS: dark gray to light gray, microxyln, no visable porosity, mottled, dense. Shale: black, fossiliferous, LS: cream fossiliferous, mottled gray, to gray bluff, to cream, microxyln packstone, poor visable porosity. Shale: gray





3560 Shale: black, LS: cream to buff, cryptoxyln,

3580 Shale: gray, LS: dark brown, foss, no visable porosity, brecciated microxyIn. Shale: black, gassey

3600 Shale: gray, laminated with streaks of carboniferous shale, LS: cream/brown, very cryptoxyln in part, with crystalline porosity, LS: gray, finexyln, pelletiod

3620 LS: cream, soft, friable, fair florescence, broke slight show of free oil, very light oil, LS: cream slight visable porosity, whith light brown stain, slight show of free oil when chrused that pops and then disapears, no odor when chrushed

- 3630 LS: light gray brown, microxyln, void crystalline porosity, with slight stain fair cut, slight florescence.
- 3632 20 min: no odor LS: gray to cream, finexlyn, broke fair stain, fair florescence.

3632 50 min: Dolomite: coarsexyInn, rhombic, no show clear crystals with light brown, streaks of cryptoxyIn, LS: cream to buff, finexyIn, no visable porosity, LS: white chky, sct black stain, LS: light gray with random voids with stain, streaks of brown coarsexyIn, LS: cream to buff, finexyIn, chky in part, no odor.

3660 Shale: gray LS: buff, finexyln, poor interxyln porosity, no visable porosity, poor interxyln porosity

3673 Shale: gray, LS: dark gray, finexyln, no visable porosity, dense mudstone.

3673 20 min:Black to gray shale. LS: white chky, LS: buff, finexyln, cryptoxyln, no visable porosity, LS: dirty gray brown,

3673 40 min. Chert: light gray/white, LS: buff, finexyln, fraible, LS: white chky, Shale: dark gray to black

3700: LS: cream to buff, finexlyn, friable, poor florescence, LS: white chky,

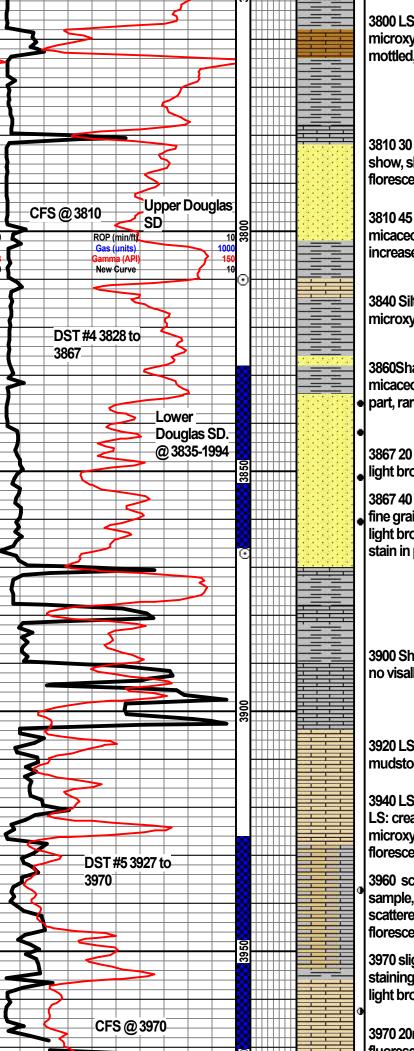
3720 LS: cream to buff to buff/gray, firnxyln, no visable porosity

3740 Shale: black to gray carboniferous in part. LS: dark gray to gray , microxyln, dense, mottled in part LS: brown, dense,

3760LS: dark gray, microxyln, dense, silty, LS: cream to buff, dense

3780Shale: grya to black, Shale: gray/green, LS: light gray, platey,

gas curve



3800 LS: cream, finxyln, friable, LS: gray finexyln to microxyln, dense LS: dark brown, microxyln, mottled, Shale: gray to black, silty in part

3810 30 min Siltstone: dirty gray, shaley, friable, no show, shaley in part, dense in part, no show no florescence.

3810 45 min: Shale: dark gray, Siltstone: light gray, micaceous, dense, no show of gas bubbles no gas increase.

3840 Siltstone: gray, micaceous, friable, LS: buff, microxyln, dense, Shale: dark gray

3860Shale: gray, slick, SD.STN/Siltstone: dirty gray, micaceous, dense clusters in part, laminar, shaley in part, rare gas bubble

3867 20 min: SD. STN: fine grain, fair florescence, light brown stain,

3867 40 min: slight odor from the sample, SD.STN: fine grain, light gray, micaceous, friable in part with light brown stain, fair even florescence, no cut, even stain in part

3900 Shale: gray, LS: dark gray, fossil hash, dense, no visalbe porosity, sample mostly sluff

3920 LS: cream to buff, finexyln to microxyln mudstone, LS: gray, microxyln, dense.

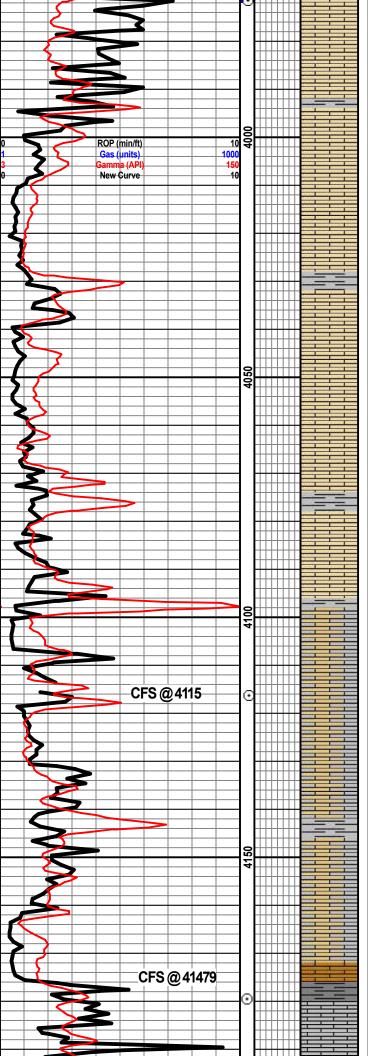
3940 LS: gray/brown, microxyln, no visable poristy, LS: cream to buff, finexlyn, LS: gray/brown, microxyln, dense, random spotty edge florescence-very rare.

3960 scattered fluoresence, slight odor from the sample, LS: cream to gray/cream to cream, scattered black spotty stain, broke slight odor, slight florescence.

3970 slight odor, LS: white, with spotty edge staining, questionable cut-fleating hard to see, LS: light brown, broke fair stain with fair florescence

3970 20min: strong odor, no increase in fluoresence. Dolomite: fine granular, ghost golite

gas curve



fair stain, no florescence, poor intergranular porosity, LS: mediumxyln, mottled, cream/gray, broke with stain, slight visable porosity.

3970 40 min: LS: coarsexyln, with dead oil stain, no florescence, LS: cream, finexyln, poor interexyln porosity.

4020 LS: buff to cream, finexyln, friable, sluff

4040: LS: cream, finexyln, friable, white, chky in part, LS: blond, finexln, poor interxyln porosity, random moldic porosity, no florescence, no show

4060: LS: white, chky, LS: buff, finexyln, scattered fine moldic porosity, cryptoxyln in part, no florescence.

4080: LS: light brown, fair visable oolmoldic porosity, mineral florescence, questionable cut, fair interxyln porosity, no show, LS: white chkyt, LS: buff, finexyln, cryptoxyln,

4100: LS: cream, finexlyn, no visable porosity, LS: gray, silty in part, finexyln, no visable porosity, LS: gray, microxyln, dense

4115: No florescence from the sample, LS: gray/buff, oolitic, slight visable oolmoldic porosity, chky in part, Shale: gray

4115 20 min: LS: gray/buff, oolitic packstone, with slight visable oolmoldic porosity, no show, no florescence, sct gas bubbles when chrushed, chky in part

4140: LS: gray/buff, microxyln, dense, no visable porosity, poor interxyln porosity, Shale: black, LS: gray, oolitic packstone,

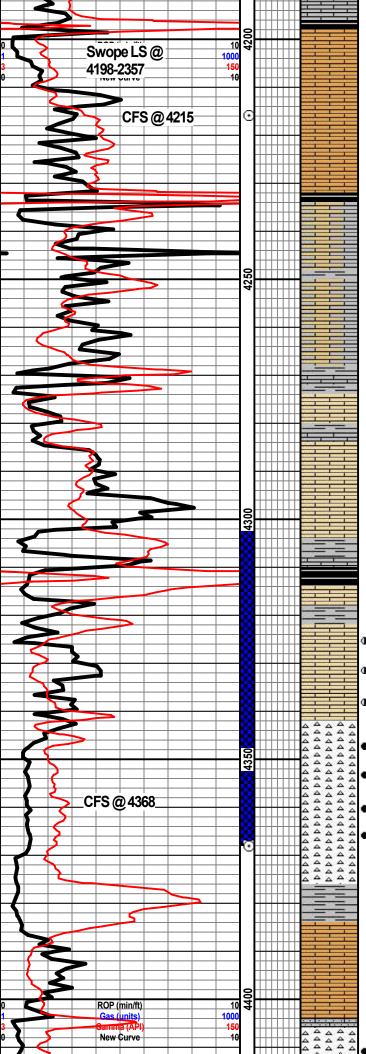
4160: LS: cream to buff, finexlyIn, friable and chky in part with Chert: gray, fossiliferous, sharp, Shale: gray, with limestone contact

4179:LS: gray/cream, finexyln, no visable porosity, LSL dark gray fossile fragments, LS: brown, microxyln, dense, Chert: gray/white, Shale: gray

4179 20 min: slight odor, LS: cream, broke fair, fair florescence, LS: white, chky, LS: buff finexyln, firm to dense, Shale: black, LS: brown fine oolitic packstone.

4179 40 min: odor from the sample. chky LS, no florescence, fossile hash in part oolitic LS with good visable inter oolitic porosity, slight stain when chrushed. LS: gray, microxyln, slight visable moldic





porosity, poor interxyln porosity, LS: dark gray/brown, with black shale contact.

4215: Shale: black, LS: brown, micro oolitic packstone, poor interxyln porosity, Chert: brown, glassey, LS: gray/brown, microxyln, dense

4215 20 min: LS: brown, oolitic packstone, scattered good florescence, poor interexyln porosity, no visable porosity to poor visable porosity, broke slight stain, no show of free oil, LS: cream/buff, finexyln to cream/gray, poor visable porosity.

4220: LS: cream to cream/gray, finexlyIn, friable in part, LS: gray/brown, microxyIn, dense, questionable odor, scatter spotty florescence, no stain,

4240 Shale: black, LS: gray/brown, microxyln, dense, Chert: semi clear to brown, no show from the tray. Chert: semi clear

4260 Shale: black, Chert: semi clear to brown,

4280: LS: cream, finexyln, no visable porosity, LS: darkblack/brown, microxyln, LS: gray/cream, microxyln, dense, Shale: black. slight odor from the sample

4300: LS: gray/brown, microxyln, dense, mostly LS: cream to buff, finexlyn, friable in part, LS: cream, pinpoint, dead oil stain-swope rocks sluff

4320 LS: cream to buff, finexly, no show no odor from this sample

4340: Shale: black, LS: heavy dark brown, stain, flutted coral. fair florescence, random.

4360: LS: buff, finxyln, with edge stain, slight visable porosity, fair florescence, scattered heavy dark brown stain, dull florescence, Shale: green gray, Chert: semi clear, shale: red

4368 20 min Chert: white, with even brown stain, slightly tripolitc, fractured edge stain, rare show of free oil even fair florescence from the sample tray.

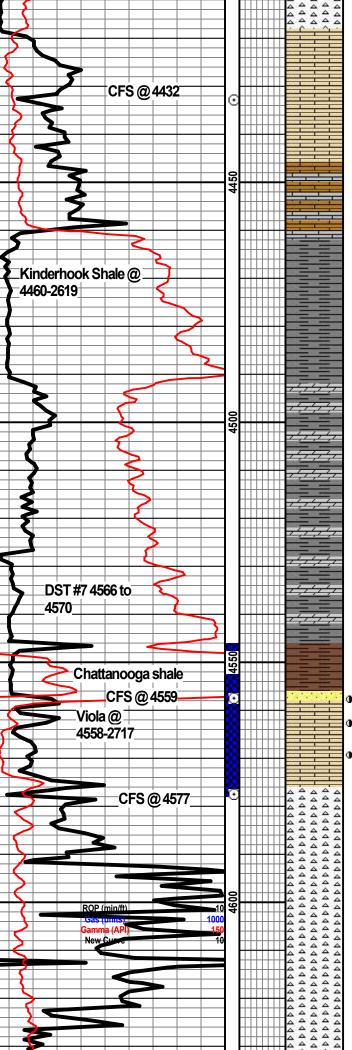
4368 40 min. Chert: fresh, sharp with edge stain and tripolitic edge porosity, even florescence from the tray. rare show of brown free oil,

4400 Chert: black, with heavy stain, random edge stain, white in part, Shale: gray

4420: Ls: brown, microxyln, dense, Chert: white, scattered tripolitc edge and on voids with black to dark brown stain

gas curve

gas curve unlagged



4432 LS: brown, microxyln to finexyln, dense, Chert: semi clear to white with increase in edge stain, sct black chert, poor to dull florescence, Chert: black to amber

4432 20 min: Chert: semi clear amber , no show, sct semi clear chert with black edge stain, LS: buff, finexlyn, dense, dull to no fluoresence from the sample, no odor

4440: LS: gray/buff, microxyln, poor interxyln porosity, Chert: amber with black edge stain.

4460: chert: white, with fair edge stain, LS: gray/brown, microxyln, dense,

4480: LS: gray/brown, microxyln, dense

4500: Shale:gray,

4520: Shale: gray, Dolomite: gray, fine granular

4540: Dolomite: gray, silty, Shale: gray

4559: Dolomite: gray, very fine granular, silty with Shale: gray

4559 20 min: Shale: brown, massive, with fluoresent spores

4559 40 min: LS: coarse xyln, sample mostly Shale: brown, A.A.

4577: 1 piece of Miesner SD: fine grain, poorly sorted, rounded grains with slight stain, fair florescence, "tight."LS: off white, coarsexyIn, friable.

4577 20 min: LS coarse xyln, scattered bright florescence, questionable odor from the sample, slight stain, scattered dead oil stain, friable,

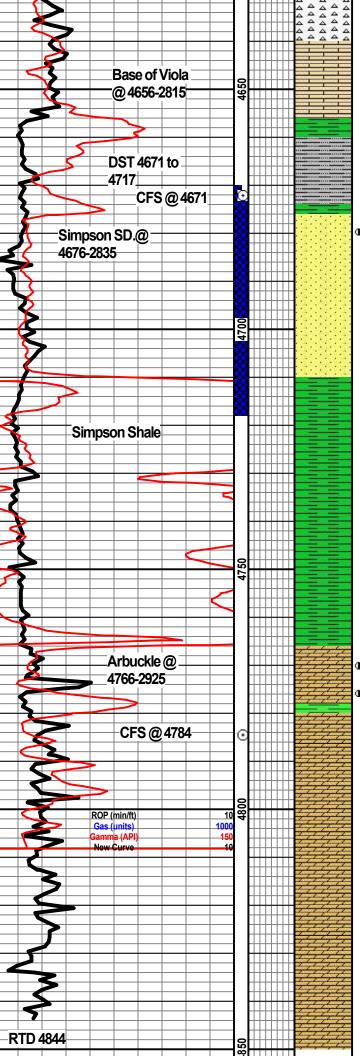
4577 55 min: decrease in LS: off white, coarsexyln, A,A,

4617: Chert: brown, sharp, with dark brown flecks,

4622: Chert: brown, sharp , dark brown, flecks, semi clear in part

4630 Chert: brown, sharp, with dark brown flecks,

4640: Chert: brown to dark brown, sharp, opaque, LS: dark dirty brown, mediumxyln, no visable



interval,

4650: Chert: brown A.A., LS: dark dirty brown, mediumxyln, no visable porosity, poor interxyln porosity, no show from this interval,Shale: dirty brown, loose crynode stem with green shale.

4660: LS: dirty brown/gray, coarsexyln, sub chky in part, no show.

4670: LS: dirty brown/gray, coarsexyln, sub chky to chky , no show. no florescence, Shale: green

4671 20 min: SD. STN: dirty gray/green, fine grain, shaley, sct gas bubbles when chrushed, poorly sorted, shaley, no florescence, loose fine grains in tray no show other than the gas bubbles.

4671 60 min: SD. STN: dirty gray/green, fine grain, shaley, sct gas bubbles when chrushed, poorly sorted, shaley, no florescence, loose fine grains in tray no show other than the gas bubbles add increase in friable sand and dolomite over growths on sand grains.

4690: SD. STN: fine grain to coarse grained, dolomitic cement, poorly sorted, poor intergranular porosity, questionable show, Shale: gray/green

4700: SD. STN: coarse grained questionable show.

4710: SD. STN: medium grained, rounded clear grained, fair florescence, broke oil show of free oil under black light.

4718: SD. STN: medium to coarse grained, rounded grains and poorly sorted, dull florescence, broke free oil under black light, dolomitic in part, fair show of free oil under black light.

4718 20 min: SD. STN: A. A. decrease in show, Shale: green to gray/green.

4730 Shale Green.

4740 Shale: green to gray/green

4750: Shale: green to green/gray

4760: Shale: green to dark green

4770: Shale: green to dark green with SD. STN: white fine grain, poor intergranular porosity.

G. C1-C5

4780: Shale: green waxey, sandy shale. SD. STN: white, fine grain, very dense, Dolomite: cream, fine granular, questionable stain.

4784 20 min: Dolomite: brown to tan, fine grainular, scattered oolmoldic porosity, broke slight show of free oil under the black light, sample mostly Dolomite: fine granular, with mineral florescence,

							scattered bright florescence, broke fair show of free oil under the black light, poor cut. dense in part, scattered included anhydrite semi clear crystal, with mineral florescence, no odor from the sample, scattered medium grained oolmoldic porosity with some even staining in the dry sample, mostly no staining.			
				006			4784 45 min: Dolomite: tan, fine granular, chky in part, poor intergranular porosity, mineral florescence, no odor from this sample.			
				4			4784 60 min: mostly sluff A.A.			
							4800: Dolomite: light tan, medium to fine granular, slight visable porosity, poor intergranular porosity, mineral florescence			
				_			4820: Shale: light green, Dolomite: A.A. with gray fine granular in part.			
							4830: Dolomite: tan to buff, microgranular, no visable porosity, poor intergranular porosity, mineral florescence.			
				20			4840 Dolomite: buff, finexyln, poor intergranular porosity, gray in part.			



Customer	QUAIL OIL & GA	AS	Lease & Well #	KELLER 1-	1			Date		10/8/2022
Service District	PRATT, KS.		County & State	BARBER, K	S Legals S/T/F	R 31-	30S-12W	Job #		10/8/2022
Job Type	2-STAGE	PROD	□ INJ	□ SWD	New Well?		□ No	Ticket #		
Equipment #	Driver			Job Safe	ty Analysis - A Discu	ssion of Haza				WP 3480
936	LESLEY	a Hard hat		□ Gloves		□ Lockout/T				
179-521	CLIFTON	H2S Monitor			ion	Required		<ul> <li>Warning Sig</li> <li>Fall Protecti</li> </ul>		9
182-534	TREVINO	Safety Footwea	ar	□ Respiratory	Protection	□ Slip/Trip/F				
523-533	JULLIAN	FRC/Protective	Clothing	Additional	Chemical/Acid PPE	Overhead		<ul> <li>Specific Job</li> <li>Muster Poin</li> </ul>		
		Hearing Protect	tion	□ Fire Extingu	isher			sues noted below		ations
					Co	mments		and holed below		
roduct/ Service					5 1/2" 2-STA	GE LONG	STRING			
Code		Desc	ription		Unit of Measur	e Quantity				Not Amoun
	HH-Long				sack	100.0	00			Net Amour \$4,500
2032	HH-Long				sack	300.0				\$4,500
	H-Plug A				sack	50.0	00		1	\$700
and the second	Gas Block				lb	846.0	00	A CONTRACTOR OF		\$2,538
		AFU Flapper Type			ea	1.0	00			\$375
	5 1/2" Latch Down	Plug & Baffle			ea	1.0	00			\$350.
and a second	5 1/2" DV Tool - 2	Stage			ea	1.0	10			\$5,000.
and the second sec	5 1/2 Turbolizer				ea	24.0	0			\$3,000.
	Mud Flush		gal	500.0	0			\$500.		
	Light Equipment M		mi	30.0	0			\$60.		
	Heavy Equipment I	Mileage			mi	90.0	0			\$360.
and the second s	Ton Mileage				tm	627.0	0			\$940.
	Cement Blending &				sack	450.0	0			\$630.0
	Depth Charge: 400	1'-5000'			job	1.0	0			\$2,500.0
	Cement Pump Serv				ea	1.0	0			\$1,500.0
	Cement Data Acqui	and the second s			job	1.00	0			\$250.0
	Cement Plug Conta	liner			job	1.00	D			\$250.0
M S	Service Supervisor				day	1.00	)			\$275.0
					-				-	
Custor	ter Section: On th	e following scale how	w would you rate H	urricane Servic	es Inc.?			100	Net:	\$37,228.5
Deer	d on this 1.1.1					Total Taxable	\$ -	Tax Rate:		
Base	_	w likely is it you wa	ould recommend F	ISI to a colleag	jue?	used on new wel Hurricane Servic	Is to be sales ta es relies on the	lucts and services x exempt. customer provided	Sale Tax:	s -
ปกะ	kely 1 2 ;	3 4 5	6 7 8	9 10	Extremely Likely	well information a services and/or p	above to make a	determination if	Total:	\$ 37,228.5

TERMS: Cash in advance unless Hurricane Services Inc. (HSI) has approved credit prior to sale. Credit terms of sale for approved accounts are total invoice due on or before the 30th day from the date of invoice. Past due accounts shall pay interest on the balance past due at the rate of 1 5% per month or the maximum allowable by applicable state or federal laws. In the event it is necessary to employ an agency and/or attorney to affect the collection, Customer hereby agrees to pay all fees directly or indirectly incurred for such collection. In the event that Customer's account with HSI becomes delinquent, HSI has the right to revoke any discounts date of issue. Pricing does not include federal, state, or local taxes, or royalties and stated price adjustments. Actual charges may vary depending upon time, equipment, and material ultimately required to perform these services. Any discount is based on 30 days net payment terms or cash. <u>DISCLAIMER NOTICE</u>: Technical data is presented in good faith, but no varranty is stated or implied. HSI assumes no liability for advice or recommendations made concerning the results fom the use of any product or service. The information presented is a best estimate of the actual results that may be achieved and should be used for comparison purposes and HSI makes no guarantee of future production performance. Customer represents and warrants that well and all associated equipment in acceptable condition to receive services by HSI. Likewise, the terms/conditions stated above, and Hurricane has been provided accurate well information in determining taxable services. The authorization below acknowledges the receipt and acceptance of all

CUSTOMER AUTHORIZATION SIGNATURE

Х



#### **CEMENT TREATMENT REPORT**

Downhole Information	Calculated Slurry -	Logal Martin	Coloriation	Slurry - Tail
Field Rep:	S-T-R:	31-30S-12W	Service:	2-STAGE
City, State:	County:	BARBER, KS	Date:	10/8/2022
Customer: QUAIL OIL & GAS	Well:	KELLER 1-31	Ticket:	WP 3480

Downr	-				Calculated Slu	rry - Lead	Ca	Iculated Slurry - Tail
Hole \$	Size:	7 7/8	in		Blend:		Blend	HH-LONG
Hole De	epth:	4844	ft		Weight:	ppg	Weight	: 15 ppg
Casing S	Size:	5 1/2	in	MIXED	Water / Sx:	gal / sx	Water / Sx	: 6.0 gal / sx
Casing De	pth:	4820	ft		Yield:	ft <sup>3</sup> / sx	Yield	1.42 ft <sup>3</sup> / sx
Tubing / Li	iner:		in		Annular Bbls / Ft.:	bbs / ft.	Annular Bbis / Ft.	: bbs / ft.
De	epth:		ft		Depth:	ft	Depth	: ft
Tool / Pac	ker:	DV TO	DOL		Annular Volume:	0.0 bbls	Annular Volume	: 0 bbis
Tool De	pth:	4002	ft		Excess:	4	Excess	:
Displacem	ent:	113.0	bbls		Total Slurry:	0.0 bbls	Total Slurry	25.0 bbls
			STAGE	TOTAL	Total Sacks:	0 sx	Total Sacks	: 100 sx
TIME R	ATE	PSI	BBLs	BBLs	REMARKS			
2:30AM			-	-	ON LOCATION- SPOT EQ	UIPMENT		
				-	RUN 117 JTS 5 1/5" X 15	.5# ,17#, 14# CASING	17#= 2276' 15.5#= 688' 14#= 1876	5'
				-	TURBOLIZERS-2,3,5,6,8,9	,10,11,12,13,19,21,23,24,2	5,26,30,31,32,48,49,50,51	
mmmm				-	DV TOOL @ 4002'			
8:40AM				-	CASING ON BOTTOM			
8:50AM					HOOK UP - BREAK CIRCL	JLATION WITH RIG PUMP	AND MUDD	
9:50AM 6.	0	400.0	5.0	5.0	H20 AHEAD			
9:53AM 6.	.0	400.0	12.0	17.0	MUDFLUSH			
9:55AM 6.	.0	350.0	5.0	22.0	H20 SPACER			
9:56AM 5.	0	300.0	25.0	47.0	MIX 100 SKS HH-LONG CI	EMENT @ 15 PPG		
10:02AM				47.0	SHUT DOWN - CLEAR PU		PLUG	
10:05AM 6.	0	-			START DISPLACEMENT			
10:13AM 5.	0	300.0	85.0		LIFT PRESSURE			
0:27AM 4.	0	700.0	110.0		SLOW RATE			
10:28AM 3.	0	1,500.0	113.0		PLUG DOWN- HELD			
10:45AM					DROP DV BOMB AND OP	EN DV TOOL		
					CIRCULATE FOR 2 HRS			
			7.0		PLUG RATHOLE			
			5.0		PLUG MOUSEHOLE THEN	WASH UP PUMP TRUCK		
						an a		
					TOP STAGE ON NEXT TRE	ATMENT REPORT		
					· · · · · · · · · · · · · · · · · · ·			
		CREW			UNIT		SUMMAR	RY
Cemer	nter:	LESL	EY		936	Average R		Total Fluid
Pump Opera		CLIFT			179-521	5.1 bpn		367 bbls
Bull		TREV			182-534	c bpi	. j 404 pai	
	< #2:	JULL			523-533			

4



#### CEMENT TREATMENT REPORT

Customer: QUAIL OIL & GAS	Well:	KELLER 1-31	Ticket:	WP 3480
City, State:	County:	BARBER, KS	Date:	10/8/2022
Field Rep:	S-T-R:	31-30S-12W	Service:	2-STAGE

Dowi	nhole I	nformatio	on		Calculated Slu	rry - Lead	Calcu	ılated Slurry - Tail
Hole	e Size:	7 7/8	in		Blend:		Blend:	HH-LONG + GASBLOK
Hole I	Depth:	4844	ft		Weight:	ppg	Weight:	15 ppg
Casing	g Size:	5 1/2	in	MIXED	Water / Sx:	gal / sx	Water / Sx:	5.8 gal / sx
Casing I	Depth:		ft		Yield:	ft <sup>3</sup> / sx	Yield:	1.43 ft <sup>3</sup> / sx
Tubing /	Liner:		in		Annular Bbls / Ft.:	bbs / ft.	Annular Bbls / Ft.:	bbs / ft.
	Depth:		ft		Depth:	ft	Depth:	ft
Tool / Pa	acker:				Annular Volume:	0.0 bbls	Annular Volume:	0 bbls
Tool I	Depthi	4002	ft		Excess:		Excess:	
Displace	ment:	94.0	bbls		Total Slurry:	0.0 bbls	Total Slurry:	76.5 bbls
			STAGE	TOTAL	Total Sacks:	0 sx	Total Sacks:	300 sx
TIME	RATE	PSI	BBLs	BBLs	REMARKS			
12:45PM	5.0	200.0	76.5	76.5	MIX 300 SKS HH-LONG +	GASBLOK @ 15 PPG		
1:15PM				76.5	SHUT DOWN- CLEAR PUI	MP AND LINES- DROP DV C	LOSING PLUG	
1:24PM		200.0	-	76.5	START DISPLACEMENT			
1:33PM	4.0	500.0	55.0	131.5	LIFT PRESSURE			
1:37PM		800.0	70.0	201.5	SLOW RATE			
1:45PM	3.0	1,700.0	94.0	295.5	PLUG DOWN- PSI UP ANI	D CLOSE DV TOOL		
				295.5	WASH UP PUMP TRUCK			
				295.5				
				295.5	JOB COMPLETE,			
				295.5	THANKS- KEVEN AND CF	REW		
				295.5				
				295.5		Australitation of the	Transmission of a second second	
				295.5				a and a second and a second and
				295.5			A CONTRACTOR OF THE OWNER OWNER OF THE OWNER	
				295.5		Sector Contractor		
				295.5				
				295.5				
				295.5				
				295.5				
		-		295.5				
				295.5				
				295.5				· · · · · · · · · · · · · · · · · · ·
				295.5				
				295.5		and a second		
				295.5 295.5			and the second second second	
				295.5				
		CREW		295.5	UNIT		SUMMARY	
Corr	nenter:	LESI			936	Average Ra		Total Fluid
Pump Op		CLIF			179-521	4.2 bpm	680.0 psi	296 bbls
	ulk #1:	TRE			182-534		po.	
	ulk #2:	JULI		The second	523-533		and the second second	

¢

Hurricane Services, Inc. 250 N. Water St., Suite #200 Wichita, KS 67202



Customer	Quail Oll & Gas		Loaca & Mary	# Keller 1-31							
Service District	-							Date		9/26/202	22
Job Type	Surface	PROD	□ INJ	te Barber.Kar				Job#			
Equipment #				D SWD	New Well?	200 March 100 Ma	D No	Ticket #		wp 3424	4
916	Driver				ety Analysis - A Disc			rocedures			
179/521	M Brungardt	Hard hat		Gloves		Lockout/Ta		Warning Sig	jns & Flaggir	g	
182534	A Clifton R Julian	H2S Monitor		Eye Prote		C Required Pr		🗆 Fall Protecti			
102034	1	Safety Footw			ry Protection	☑ Slip/Trip/Fa	ll Hazards	Specific Job	Sequence/E:	epectation	15
	J Triveno	G FRC/Protecti			I Chemical/Acid PPE	Overhead H	lazards	Muster Poin			
		Hearing Prot	rection	Fire Exting		D Additional o	concerns or i	ssues noted below	v		
					Co	omments					
		_									
roduct/ Service Code		Des			Unit of Measu						
070	60/40/2 Pozmix A				sack	1	1			Net	Amou
100	Calcium Chloride				lb	225.00					\$3,375
120	Cello-flake				lb	582.00					\$436
)15	Light Equipment M	lileage				57.00					\$99
110	Heavy Equipment	Mileage			mi	30.00			<u> </u>		\$60
20	Ton Mileage			······	mi	60.00					\$240
sa	Cement Blending 8	Mixing Service			tm	291.00			_		\$436
	Depth Charge: 0'-5				sack	226.00	+				\$315
	Cement Data Acqu			****	job	1.00				\$	61,000
	Service Supervisor				job	1.00					\$250
T	8 5/8" Cement Bas				day	1.00					\$275.
T	8 5/8" Centralizer	***************************************			ea	1.00					\$500.
					ea	3.00					\$270.
									-		
							ļ				
			****								
Custon	ner Section: On the	e following scale h	ow would you rate	Hurricane Servi	ces inc.?				Mak		
Raci	and on this lob be	u likeshe to th				Total Taxable	\$ -	Tax Rate:	Net:	\$7	,257.7
Lucs	y	and the second s	vould recommend	HSI to a collea	igue?	State tax laws dee	m certain proc	unte and convince	Sale Tax:	s	
						used on new wells	to be sales ta relies on the	x exempt.	- uno Tax.	\$	
Unit	kely 1 2 3	345	6 7 8	9 10	Exiremely Likely	well information ab services and/or pro	ove to make a	Antomination if			

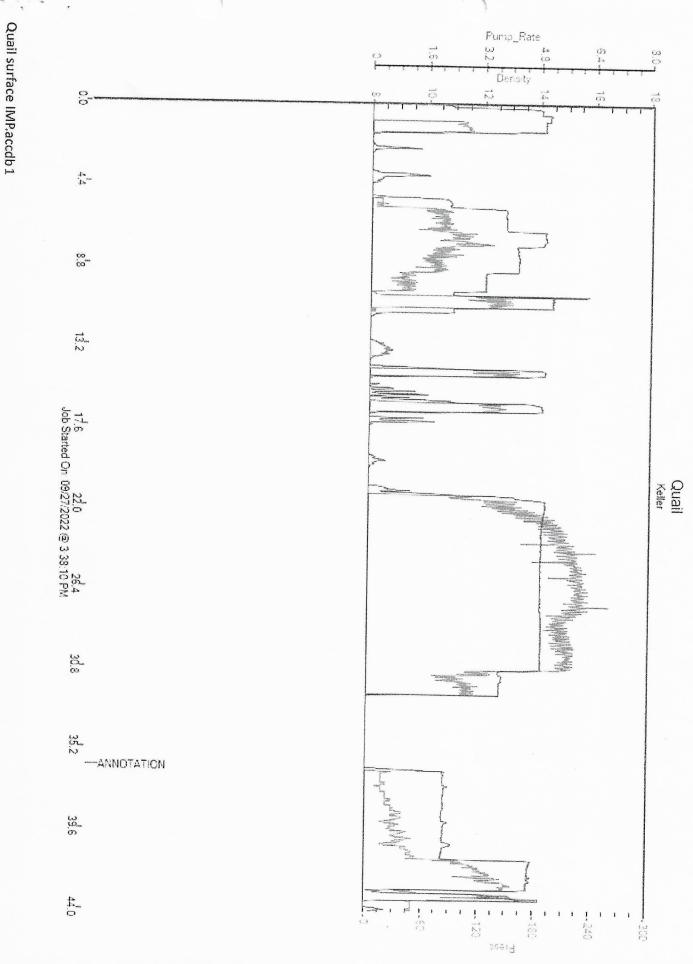
TERMS; Cash in advance unless Huricane Services Inc. (HSI) has approved credit prior to sale. Credit terms of sale for approved accounts are total invoice due on or before the 30th day from the date of invoice. Past affect the collection, Customer hereby agrees to pay all fees directly or indirectly incurred for such collection. In the event that Customer's account with HSI becomes delinquent, HSI has the right to revoke any discounts date of issue. Prioring does not include federal, state, or local taxes, or royalties and stated price adjustments. Actual charges may vary depending upon time, equipment, and material ultimately required to perform these of any product or service. The information previously applied in graving the results form the use of any product or service. The information previously and HSI makes no guarantee of full ure production performance. Customer represents and warrants that well and all associated equipment, in acceptable condition to receive services by HSI. Likewise, the terms/conditions stated above, and Huricane has been provided accurate well information in determining taxable services. The authorization below acknowledges the receipt and acceptance of all

5

ent

CUSTOMER AUTHORIZATION SIGNATURE

EMEN	TTR	EATME	NT REP	ORT				
			il & Gas		Well:			
	States Elm Mille					Keller 1-31	Ticke	et: wp 3424
			nompsoi	3	County:	Barber.Kans	as Dat	e: 9/26/2022
		£		1	S-T-R:		Servic	e: Surface
		Informati			Calculated Si	irry - Lead		alculated Slurry - Tail
	e Size: Depth:				Blend:	60/40/2 & 3	Blen	and the second se
	g Size:	320 8 5/8			Weight:	14.8 ppg	Weigh	
	Depth:	311			Water / Sx:	5.1 gal / sx	Water / S	
	Liner:		in		Yield: Annular Bbls / Ft.:	1.21 ft <sup>3</sup> / sx	Yiel	
	Depth:		ft		Depth:	bbs / ft.	Annular Bbis / Fr	
'ooi / P	acker:				Annular Volume:	0.0 bbis	Dept	
	Depth:		ft		Excess:		Annular Volum Excess	
isplace	ment:	18.0	bbls		Total Slurry:	48.5 bbls	Total Siurry	
IME	RATE	PSI	STAGE BBLs	TOTAL BBLs	Total Sacks:	225 sx	Total Sacks	
2:15 PM	1 1		-	- DDIeS			te Karantan in	
2:30 PM					on location job and safety spot trucks and rig up	1		
					centralizers 1 3 5	****		
				-	basket 5			******
				-				
:45 PM					start casing in the hole			
:40 PM					casing on bottoim and cir	culate		
:45 PM								
	5.0	200.0	5.0	5.0	start cement fresh water			
	5.0	200.0	48.0	53.0	mix 225 sacks cement			
:15 PM					cement in and shut down			
							······	
20 PM					start displacementr			
SU PIN	3.0	100.0	18.0		displacement in			
					Strandard data to a			······································
					circulated 10bbls to the pit			
						*****		
		CREW			UNIT		SUMMAR	
Ceme p Oper		M Brur			916	Average Rate	Average Pressure	Total Fluid
		A Clifte			179/521		and a second	I ULEI FILIN



Page

# Sac