

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 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	Black Oak Exploration, LLC
Well Name	DANA 1-22
Doc ID	1675361

All Electric Logs Run

POR
MICRO
SONIC
DIL



CEMENT TREATMENT REPORT

Customer: Black Oak Exploration	Well: Dana #1-22	Ticket: WP 3224
City, State: Rexford KS	County: Decatur KS	Date: 8/13/2022
Field Rep: Arturo	S-T-R: 22-5S-30W	Service: Surface

Downhole Information	
Hole Size:	12 1/4 in
Hole Depth:	265 ft
Casing Size:	8 5/8 in
Casing Depth:	262 ft
Tubing / Liner:	in
Depth:	ft
Tool / Packer:	
Tool Depth:	ft
Displacement:	15.2 bbls

Calculated Slurry - Lead	
Blend:	H-325
Weight:	14.8 ppg
Water / Sx:	6.9 gal / sx
Yield:	1.41 ft ³ / sx
Annular Bbls / Ft.:	0.0735 bbs / ft.
Depth:	262 ft
Annular Volume:	19.3 bbls
Excess:	
Total Slurry:	50.2 bbls
Total Sacks:	200 sx

Calculated Slurry - Tail	
Blend:	
Weight:	ppg
Water / Sx:	gal / sx
Yield:	ft ³ / sx
Annular Bbls / Ft.:	bbs / ft.
Depth:	ft
Annular Volume:	0 bbls
Excess:	
Total Slurry:	0.0 bbls
Total Sacks:	0 sx

TIME	RATE	PSI	STAGE BBLs	TOTAL BBLs	REMARKS
10:38 AM			-	-	Arrived on location
10:48 AM				-	Safety meeting
10:58 AM				-	Rigged up
11:19 AM				-	Casing on bottom
11:24 AM				-	Circulated mud
11:35 AM	2.9	100.0	5.0	5.0	Water ahead
11:37 AM	5.4	250.0	50.2	55.2	Mixed 200 sacks H-325 cement @ 14.8 ppg
11:52 AM	4.2	150.0	15.2	70.4	Begin displacement
11:56 AM		100.0		70.4	Plug down and shut in with 5 bbls cement circulated to pit
11:58 AM				70.4	Washed up and rigged down
12:25 PM				70.4	Left locaton

CREW		UNIT	SUMMARY		
Cementer:	John	73	Average Rate	Average Pressure	Total Fluid
Pump Operator:	Jose V	208	4.2 bpm	150 psi	70 bbls
Bulk #1:	Kale	205			
Bulk #2:					



CEMENT TREATMENT REPORT

Customer: Black Oak	Well: Dana # 1-22	Ticket: WP-3251
City, State: Selden KS	County: Decatur KS	Date: 8/19/2022
Field Rep: Arturo	S-T-R: 22-5S-30W	Service: PTA

Downhole Information	
Hole Size:	7 7/8 in
Hole Depth:	4180 ft
Casing Size:	in
Casing Depth:	ft
Tubing / Liner:	in
Depth:	ft
Tool / Packer:	
Tool Depth:	ft
Displacement:	53.2 bbls

Calculated Slurry - Lead	
Blend:	H-Pug
Weight:	13.8 ppg
Water / Sx:	6.9 gal / sx
Yield:	1.42 ft ³ / sx
Annular Bbls / Ft.:	0.0406 bbs / ft.
Depth:	2590 ft
Annular Volume:	105.2 bbls
Excess:	
Total Slurry:	64.4 bbls
Total Sacks:	255 sx

Calculated Slurry - Tail	
Blend:	
Weight:	ppg
Water / Sx:	gal / sx
Yield:	ft ³ / sx
Annular Bbls / Ft.:	bbs / ft.
Depth:	ft
Annular Volume:	0 bbls
Excess:	
Total Slurry:	0.0 bbls
Total Sacks:	0 sx

TIME	RATE	PSI	BBLs	TOTAL BBLs	REMARKS
12:30p			-	-	Arrival
12:35p				-	Safety meeting
12:40p				-	Rig up
5:06p	5.1	350.0	5.0	5.0	H2O ahead
5:09p	4.3	390.0	12.6	17.6	Mixed 50 sks of H-plug @ 13.8 ppg @ 2590'
5:11p	5.7	240.0	20.0	37.6	Displaced H2O
5:15p				37.6	Pull pipe to 1780'
5:46p	5.1	320.0	5.0	42.6	H2O ahead
5:49p	4.6	380.0	25.2	67.8	Mixed 100 sks of H-plug @ 13.8 ppg @ 1780'
5:55p	4.5	340.0	16.4	84.2	Displaced H2O
6:00p				84.2	Pull pipe to 320'
6:50p	5.3	180.0	5.0		H2O ahead
6:52p	5.0	390.0	12.6		Mixed 50 sks of H-plug @ 13.8 ppg @ 320'
6:56p	3.0	150.0	4.5		Displaced H2O
7:00p					Pull pipe to surface
7:45p	3.0	110.0	2.5		Mixed 10 sks of H-plug @ 13.8 ppg @ 40'
7:50p	3.0	110.0	7.5		Mixed 30 sks of H-plug @ 13.8 ppg @ Rat hole
7:55p	3.0	110.0	3.8		Mixed 15 sks of H-plug @ 13.8 ppg @ Mouse hole
8:00p					Plug down
8:02p					Wash up
8:05p					Rig down
8:20p					Depart location

CREW		UNIT	SUMMARY		
Cementer:	Jesse	78	Average Rate	Average Pressure	Total Fluid
Pump Operator:	Michael	230	4.3 bpm	256 psi	120 bbls
Bulk #1:	Tyler	157-254			
Bulk #2:					

BLACK OAK



EXPLORATION

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

Well Name: DANA 1-22
Well Id:
Location: Section 22 - 5S - 30W Decatur Co, Kansas
License Number: API # 15-039-21286
Spud Date: Aug. 15th 2022
Surface Coordinates: 340' FSL & 330' FEL
Region: Unknown
Drilling Completed: Aug. 18th 2022

Bottom Hole
Coordinates:
Ground Elevation (ft): 2849' K.B. Elevation (ft): 2854'
Logged Interval (ft): 3650 To: 4180' Total Depth (ft): 4180'
Formation: Lansing Kansas City
Type of Drilling Fluid: Chemical Gel/Polymer Fresh Water -Based

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

OPERATOR

Company: BLACK OAK EXPLORATION, LLC
Address: 1474 S St Paul St
Denver CO 80210

GEOLOGIST

Name: TIM HEDRICK
Company: EARTH TECH OGL, INC
Address: Po BOX 683
Hooker, okla. 73945
580-754-0062 Cell

ROCK TYPES

LITHOLOGY

- Anhy
- Bent
- Brec
- Cht
- Clyst
- Coal
- Congl
- Dol
- Gyp
- Igne
- Lmst
- Meta
- Mrlst
- Salt
- Shale
- Shcol
- Shgy
- Sltst
- Ss
- Till
- Sltstn
- Shale
- Sandylms
- Lms
- Gry sh
- Dtd
- Dol
- Carb sh
- pipesymbol
- unknown lith
- Red shale

FOSSIL

- Oomoldic
- Fuss
- Algae

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MINERAL

- Silty
- Sand
- Dol
- Chlorite
- Anhy
- Arggrn
- Arg
- Bent
- Bit
- Brecfrag
- Calc
- Carb
- Chtdk
- Chtlt
- Dol

- Amph
- Belm
- Bioclst
- Brach
- Bryozoa
- Cephal
- Coral
- Crin
- Echin
- Fish
- Foram
- Fossil
- Gastro
- Oolite
- Ostra
- Pelec
- Pellet
- Pisolite
- Plant
- Strom

STRINGER

- Sh
- Sandylms
- Lms
- Gryslt
- Grysh
- Dol
- Clystn
- Carbsh
- Anhy
- Arg
- Bent
- Coal
- Dol
- Gyp
- Ls
- Mrst
- Sltstrg

- Feldspar
- Ferrpel
- Ferr
- Glau
- Gyp
- Hvymin
- Kaol
- Marl
- Minxl
- Nodule
- Phos
- Pyr
- Salt
- Sandy
- Silt
- Sil
- Sulphur
- Tuff



Ssstrg

TEXTURE

- Boundst
- Chalky
- Cryxln
- Earthy
- Finexln
- Grainst
- Lithogr
- Microxln
- Mudst
- Packst
- Wackest

OIL SHOW

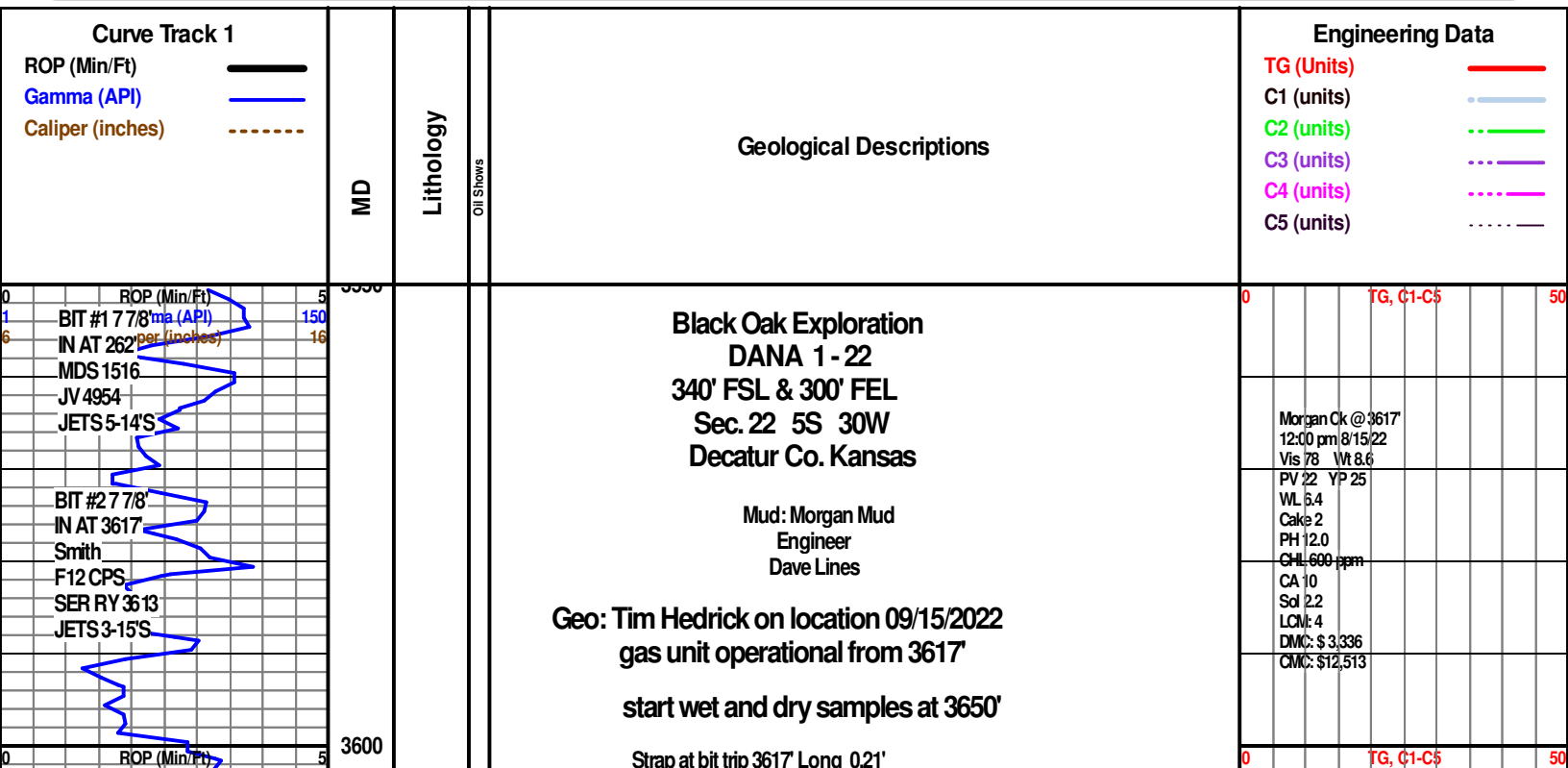
- Gas show
- Even
- Spotted
- Ques
- Dead

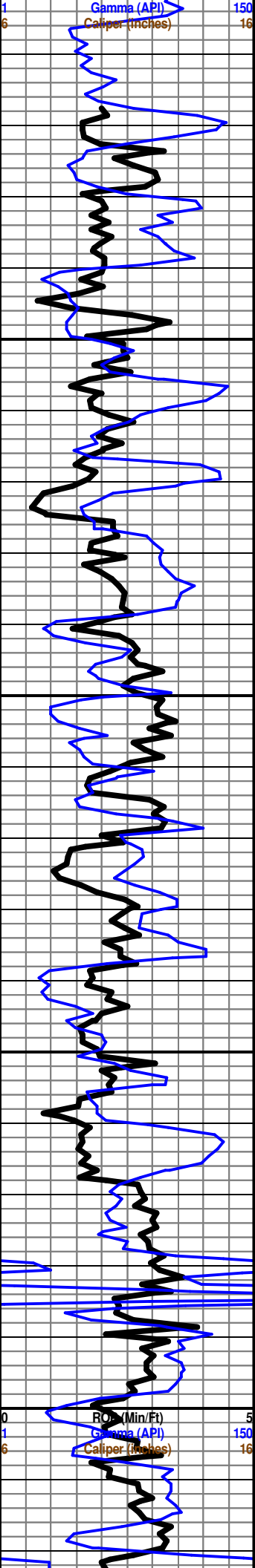
INTERVAL

- Dst
- Core
- Dst
- Straddle test tail pip

EVENT

- Rft
- Sidewall
- Dst
- Open hole
- Perforations





Limestone- cream light gray - hard dense, micro crystalline to very tight sucrosic matrix, embed light gray shale, dull yellow mineral fluorescence in part, no visible porosity, no visible show

Shale - red to reddish brown to gray in part, very soft gummy to firm blocky in part

Topeka 3670' (-816')

Limestone- light tan off white hard to brittle fine crystalline re-crystalline matrix, embed fossil fragments in part, embed chlorite or glauconite, scattered embed chalk and free soft white chalk, dull yellow mineral fluorescence thruout, possible micro pinpoint porosity, no visible show or cut

Limestone- cream tan light gray, hard dense mottled, very tight sucrosic matrix to micro crystalline in part, trace of fossil fragments, traces of laminated and disseminated shale in part, dull yellow mineral fluorescence in part, no visible porosity, no visible show

Shale- light gray to light green, red soft gummy in part to slightly silty in part

Deer Creek 3720' (-866')

Limestone - cream off white light tan hard to brittle very sucro matrix to re-crystalline in part with abundant embed very fine grain quartz with embed glauconite or chlorite in scattered thruout with heavy traces of soft white chalk in part, dull yellow mineral fluorescence in part. poor scattered inte-crystalline porosity to trace micro vug porosity in part to no porosity, no visible show or cut

Limestone- white off white cream- hard to brittle very sucrosic to sub chalky with abundant free soft white chalk, traces of embed fossil fragments in part, bright yellow mineral fluorescence thruout, poor micro pinpoint porosity in part to no porosity, no visible show or cut

Shale- red firm in part to soft gummy grading to green smooth texture to black carbonaceous in part

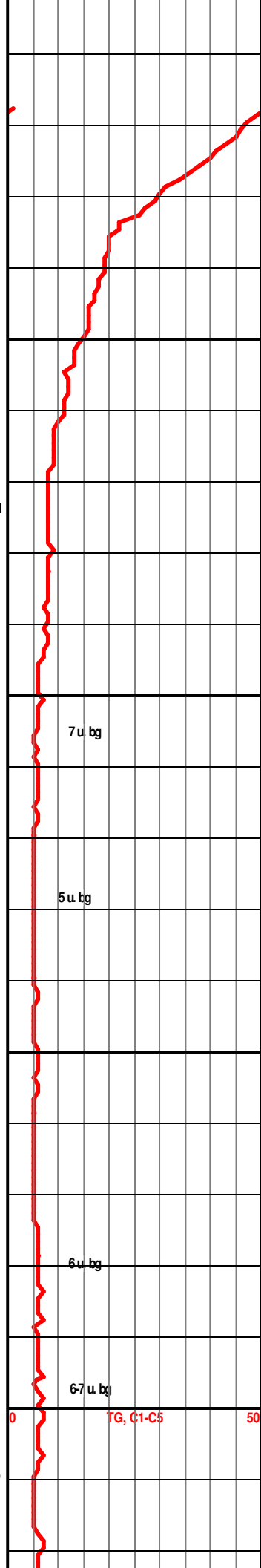
LeCompton 3778' (-924')

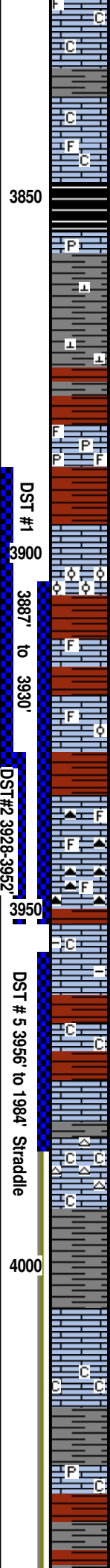
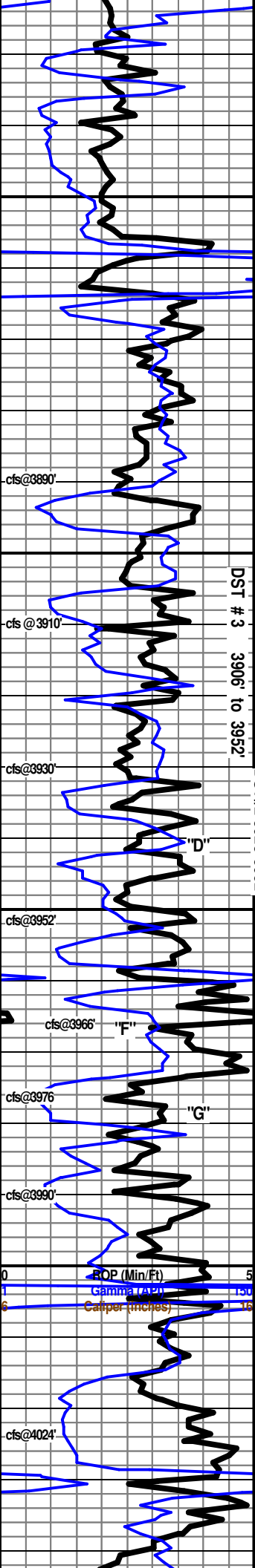
Limestone- off white cream light tan - hard dense to brittle, tight sucrosic matrix to sucrosic sub chalky, trace fossil fragments in part, abundant soft white free chalk, no fluorescence, traces of embed very fine quartz grains in part, dull yellow mineral fluorescence in part to no fluorescence, no visible porosity, no visible show

Shale -red- very soft gummy texture to dark gray firm blocky very calcareous to traces of black soft carbonaceous

Limestone - cream light tan tan hard dense in part to brittle, sucrosic matrix to fine crystalline with embed small to medium calcite crystals, trace of fossil fragments, trace of disseminated pyrite, heavy traces of soft white free chalk, dull yellow fluorescence, no visible porosity, no visible show or cut

Limestone - cream light tan hard very brittle, re-crystalline matrix to sucrosic in part, embed fossil fragments thruout,





very sub chalky in part, dull to light yellow mineral fluorescence in part, poor to fair inter-crystalline porosity in 30% to no porosity, no cut or show

Shale- light gray firm blocky very calcareous

Limestone- white off white cream hard to brittle very sucrosic matrix to sucrosic sub chalky with abundant soft white free chalk, trace of fossil fragments in part, dull yellow mineral fluorescence in part, poor micro pinpoint porosity, no visible show

Heebner 3848' (-994')

Limestone- tan light gray gray hard dense tight sucrosic matrix to micro crystalline, embed disseminated pyrite, no fluorescence, no visible porosity, no visible show

Shale - light to medium gray - firm blocky smooth to grainy texture slightly calcareous grading to red very soft gummy texture

Toronto 3882' (-1028')

Limestone- cream off white, hard dense trace brittle fine crystalline re-crystalline with scattered embed fossil fragments, disseminated pyrite, traces of medium calcite crystals, yellow fluorescence, no visible porosity, no visible show

Lansing "A" 3896' (-1042')

Limestone light tan tan brown due to oil stain thruout, hard dense in part to brittle fine crystalline re-crystalline matrix abundant micro oolites embed thruout, trace oolites at point matrix, trace large calcite crystal w/ stain, dull yellow gold fluorescence thruout, poor fair traces good inter-oolitic porosity, possible fractured porosity in part, fair oil odor, excellent flush to excellent slow stream cut thruout, live oil in dish and in cup, trace of dos in part

Limestone - cream light tan hard dense micro crystalline to very fine crystalline, trace fossil fragments in part, dull yellow mineral fluor. no visible porosity, no visible show

Lansing "C" 3921' (-1067')

Limestone - cream light tan with spotted heavy oil stain fine crystalline to tight sucrosic in part, small fossil fragments in part traces of micro oolites in part, very dull yellow old fluorescence in part, traces of scattered micro vug porosity with tar stain, fair to good flush cut fair slow stream cut in 20% no odor

3934-3942' Limestone- cream tan brown live oil and stain in 75% w/ tarry stain scattered, very brittle to hard, very sucrosic matrix to re-crystalline, embed fossil fragments thruout, small calcite crystals in part, traces gray chert, dull yellow gold fluorescence thruout, poor fair to good visible inter-crystalline porosity, scattered fair to traces good inter-fossiliferous porosity, scattered poor microvug porosity in part, excellent flush and slow stream cut, good oil odor, live oil drops

3945-3950'

Limestone- cream tan brown abundant live oil thruout, very brittle to hard in part, very sucrosic matrix to re-crystalline, fossil fragments in part, small calcite crystals in part embed, tripolitic gray chert w/ live oil, dull yellow gold fluorescence thruout, poor fair to good visible inter-crystalline porosity, traces inter-fossiliferous porosity, scattered fair microvug porosity in part, excellent flush and slow stream cut, very strong oil odor, abundant live oil drops in tray, odor at pits

Limestone - off white cream lt green hard dense crypto-crystalline to sli chalky in part, traces free soft white chalk in part, no fluorescence, no visible porosity, no visible show

3973-3978' Limestone- light tan tan with oil stain thruout, hard to very brittle very sucrosic matrix to re-crystalline with abundant small embed ooids in part, fossil fragments in part, dull yellow gold fluorescence thruout, fair to good visible inter-crystalline porosity in 40%, fair to good microvug porosity in 30%, excellent flush and excellent slow stream cut thruout, good oil odor abundant free oil in samples and droplets in cup. fair oil odor

3979'- 3988' off white cream hard dense to brittle fine crystalline to abundant firm to soft white chalk with traces of dos in part. Abundant light gray chert, dull to light yellow mineral fluorescence in part, no visible porosity, trace of poor streaming cut in part to no cut

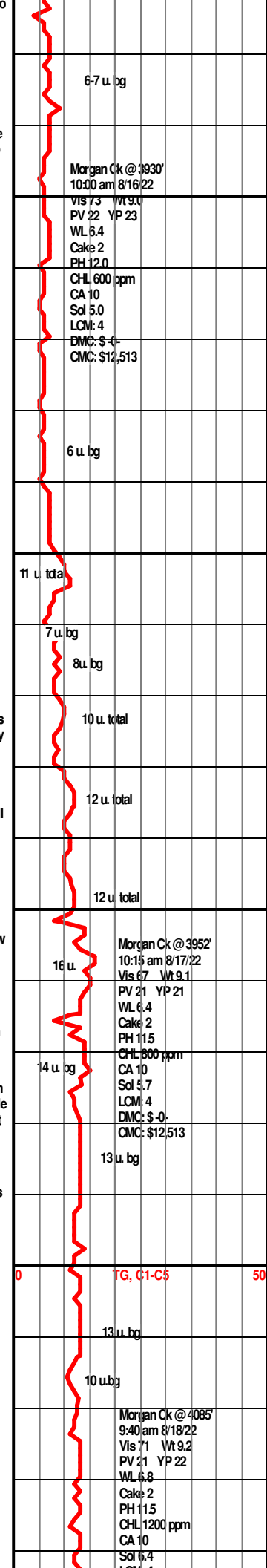
Lansing "H" 4008' (-1154')

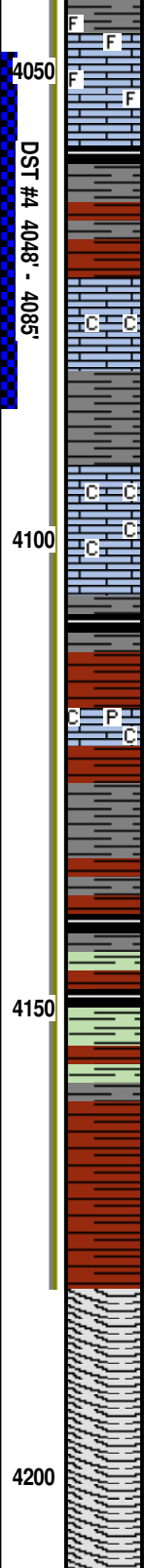
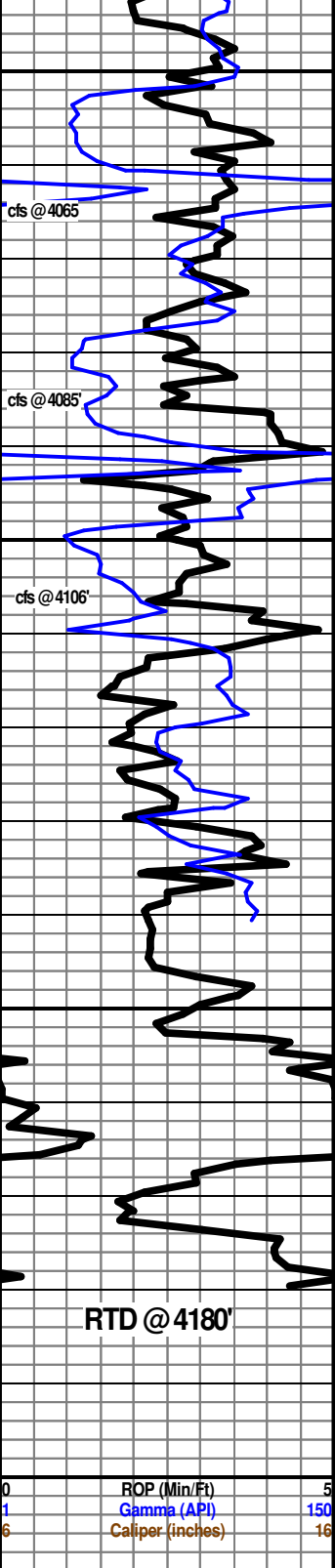
Limestone - off white cream, traces of dead oil stain in 10%, hard in part to brittle tight sucrosic matrix sub chalky to chalky in part free firm and soft white chalk in part, dull yellow fluorescence in part or no fluorescence, no visible porosity, poor visible cut in 10% to no cut

Limestone- cream tan hard dense crypto-crystalline to tight sucrosic in part with traces free soft white chalk, traces pyrite in part, dull yellow mineral fluorescence, no porosity, no visible show

Shale- Green gray firm blocky to red soft gummy

Lansing "J" 4046' (- 1192')





Limestone- cream tan brown hard dense crypto to very fine crystalline , traces fossil fragments in part, dull yellow fluorescence , no visible porosity, no visible show or cut

Lansing "K" 4072' (- 1218')

Limestone- dark tan to brown with even live oil stain in 90%, very sucrosic matrix with embed fossil fragments thruout traces small calcite crystals in part, dull yellow gold fluorescence in 90%, fair to good visible micro pin point and inter-crystalline porosity in 50%, scattered fair to good micro vugular porosity in 20%, fair visible scattered inter-fossil porosity in part, excellent flush cut and excellent slow steam cut, abundant live oil in dish and cup, good oil odor

Lansing "L" 4091' (-1237')

Limestone- cream light tan light gray, hard dense crypto-crystalline to very fine crystalline with firm to soft white chalk in part, no fluorescence , no visible porosity, no visible show or cut

BKC 4107' (-1253')

Shale- green red firm blocky smooth texture to black soft carbonaceous

limestone-Off white cream- hard in part to soft, very sucrosic to sucrosic sub chlky to chalky, traces of abundant free soft white chalk,trace pyrite clusters, Very dull yellow fluorescence in part, no visible porosity, no visible show

Shales - red green gray dark gray - mottled very soft gummy texture to firm blocky in part to black soft carbonaceous

Shales- red very soft gummy to green firm blocky smooth texture, dark gray smooth to gummy

Shale- red to dark red firm blocky in part to abundant very soft gummy texture

RTD 4180' @ 7:30 PM August 18th, 2022

CFS

SHORT TRIP TIL PIPE FREE

CTCH 1.5 HOURS

TRIP OUT FOR LOGS

11 u. bg	LCM: 4 DMC: \$-C- CMC: \$12,513
19 u. total	
21 u. shale gas	
13 u. bg	
15 u. bg	
19.5 total	
15 u. bg	
18 u.	
18 u. bg	
16 u. bg	
RTD @ 4180'	
0	TG, C1-C5 50

0	ROP (Min/Ft)	5
1	Gamma (API)	150
6	Caliper (inches)	16



DRILL STEM TEST REPORT

Prepared For: **Black Oak Exploration LLC**

1474 S St Paul St.
Denver, CO 80210

ATTN: Clayton Camozzi

Dana #1-22

22-5s-30w Decatur,KS

Start Date: 2022.08.16 @ 09:40:00

End Date: 2022.08.16 @ 15:18:36

Job Ticket #: 68980 DST #: 1

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2022.08.19 @ 17:03:52

Black Oak Exploration LLC
22-5s-30w Decatur,KS
Dana #1-22
DST # 1
LKC "A-C"
2022.08.16



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Black Oak Exploration LLC

22-5s-30w Decatur, KS

1474 S St Paul St.
Denver, CO 80210

Dana #1-22

Job Ticket: 68980

DST#: 1

ATTN: Clayton Camozzi

Test Start: 2022.08.16 @ 09:40:00

GENERAL INFORMATION:

Formation: **LKC "A - C"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 11:39:51

Time Test Ended: 15:18:36

Test Type: Conventional Bottom Hole (Initial)

Tester: James Winder

Unit No: 73

Interval: 3887.00 ft (KB) To 3930.00 ft (KB) (TVD)

Reference Elevations: 2855.00 ft (KB)

Total Depth: 3930.00 ft (KB) (TVD)

2850.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 6771

Inside

Press@RunDepth: 44.67 psig @ 3888.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2022.08.16

End Date: 2022.08.16

Last Calib.: 2022.08.16

Start Time: 09:40:01

End Time: 15:18:36

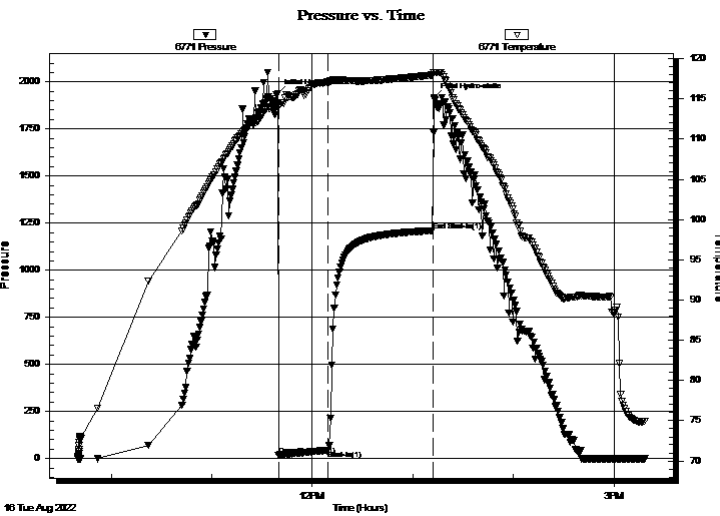
Time On Btm: 2022.08.16 @ 11:39:21

Time Off Btm: 2022.08.16 @ 13:12:51

TEST COMMENT: 30 - IF: 1/8" Blow at open, built to and stayed at 3/4"

60 - ISI: No blow

Pulled tools



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1938.32	114.40	Initial Hydro-static
1	19.11	114.07	Open To Flow (1)
31	44.67	117.00	Shut-In(1)
93	1209.48	117.97	End Shut-In(1)
94	1913.51	118.29	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
59.00	Mud 100%	0.29

Gas Rates

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



DRILL STEM TEST REPORT

Black Oak Exploration LLC

22-5s-30w Decatur,KS1474 S St Paul St.
Denver, CO 80210**Dana #1-22**

ATTN: Clayton Camozzi

Job Ticket: 68980

DST#: 1

Test Start: 2022.08.16 @ 09:40:00

GENERAL INFORMATION:Formation: **LKC "A - C"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 11:39:51

Time Test Ended: 15:18:36

Test Type: Conventional Bottom Hole (Initial)

Tester: James Winder

Unit No: 73

Interval: 3887.00 ft (KB) To 3930.00 ft (KB) (TVD)

Reference Elevations: 2855.00 ft (KB)

Total Depth: 3930.00 ft (KB) (TVD)

2850.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8367**Outside**

Press@RunDepth: psig @ 3888.00 ft (KB)

Capacity: 8000.00 psig

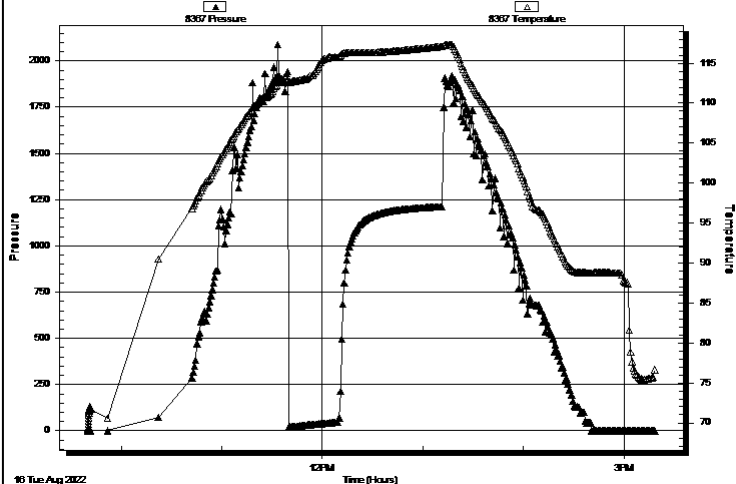
Start Date: 2022.08.16 End Date: 2022.08.16

Last Calib.: 2022.08.16

Start Time: 09:40:01 End Time: 15:18:21

Time On Btm:

Time Off Btm:

TEST COMMENT: 30 - IF: 1/8" Blow at open, built to and stayed at 3/4"
60 - ISl: No blow
Pulled tools**Pressure vs. Time****PRESSURE SUMMARY**

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
59.00	Mud 100%	0.29

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Black Oak Exploration LLC

22-5s-30w Decatur,KS

1474 S St Paul St.
Denver, CO 80210

Dana #1-22

Job Ticket: 68980

DST#: 1

ATTN: Clayton Camozzi

Test Start: 2022.08.16 @ 09:40:00

Tool Information

Drill Pipe:	Length: 3643.00 ft	Diameter: 3.80 inches	Volume: 51.10 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 239.00 ft	Diameter: 2.25 inches	Volume: 1.18 bbl	Weight to Pull Loose: 75000.00 lb
			<u>Total Volume: 52.28 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	28.00 ft			String Weight: Initial 62000.00 lb
Depth to Top Packer:	3887.00 ft			Final 62000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	43.00 ft			
Tool Length:	76.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3855.00	
Shut In Tool	5.00			3860.00	
Hydraulic tool	5.00			3865.00	
Jars	5.00			3870.00	
EM Tool	4.00			3874.00	
Safety Joint	3.00			3877.00	
Packer	5.00			3882.00	33.00 Bottom Of Top Packer
Packer	5.00			3887.00	
Stubb	1.00			3888.00	
Recorder	0.00	6771	Inside	3888.00	
Recorder	0.00	8367	Outside	3888.00	
Perforations	5.00			3893.00	
Blank Spacing	34.00			3927.00	
Bullnose	3.00			3930.00	43.00 Bottom Packers & Anchor

Total Tool Length: 76.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Black Oak Exploration LLC

22-5s-30w Decatur,KS

1474 S St Paul St.
Denver, CO 80210

Dana #1-22

Job Ticket: 68980

DST#: 1

ATTN: Clayton Camozzi

Test Start: 2022.08.16 @ 09:40:00

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: 73.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.37 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 600.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
59.00	Mud 100%	0.290

Total Length: 59.00 ft Total Volume: 0.290 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

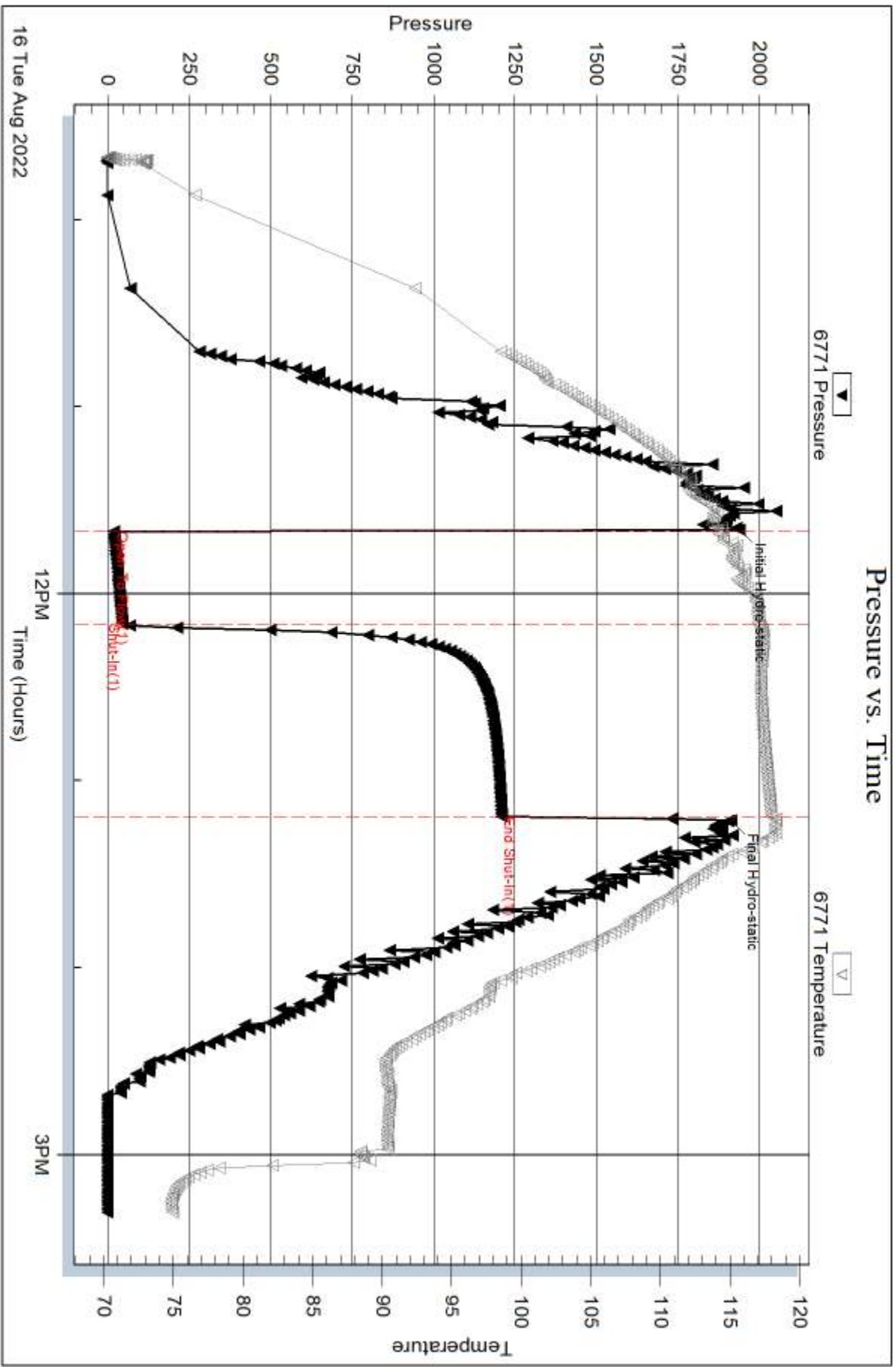
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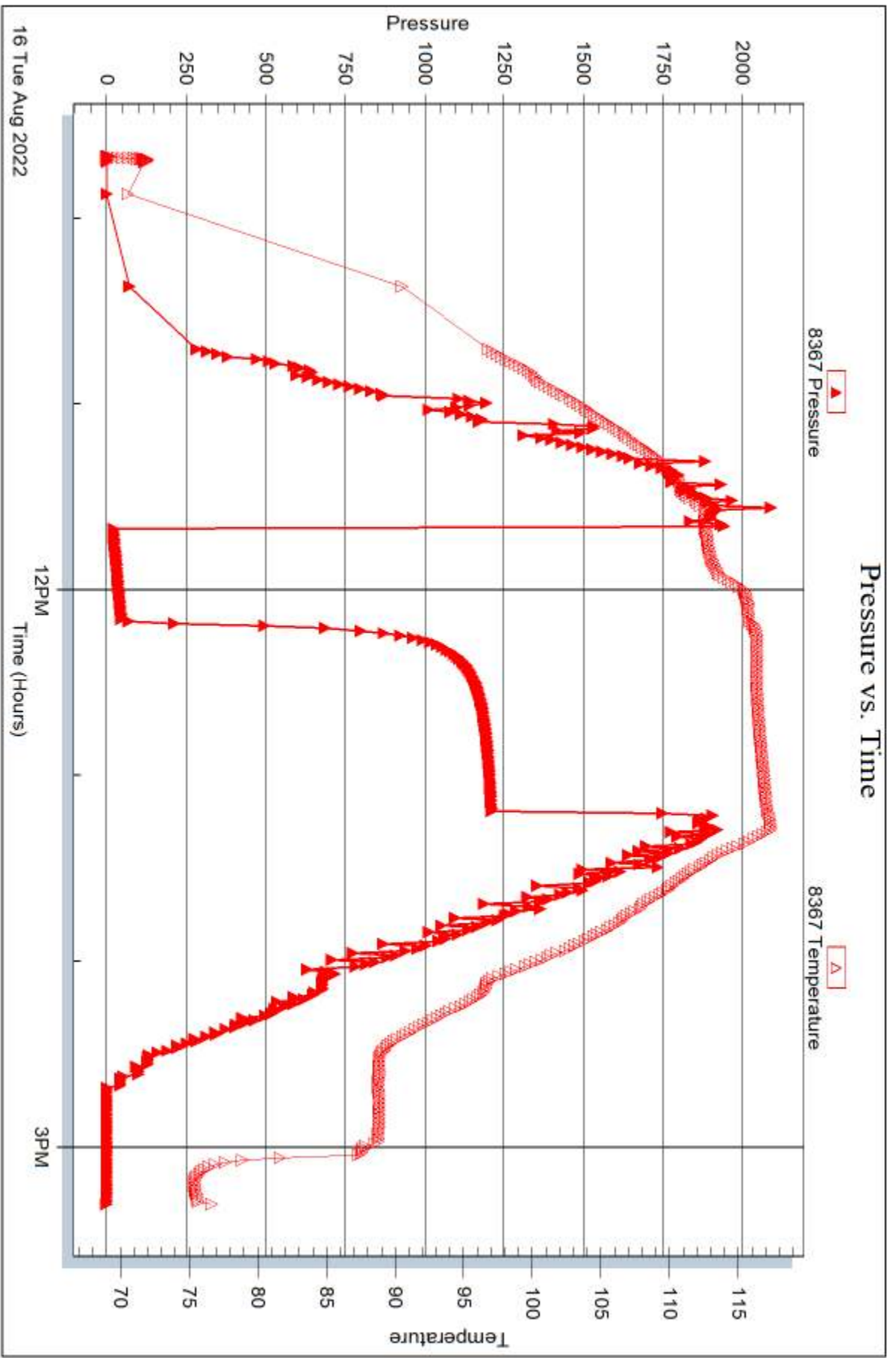
Inside

Black Oak Exploration LLC

Dana #1-22

DST Test Number: 1







DRILL STEM TEST REPORT

Prepared For: **Black Oak Exploration LLC**

1474 S St Paul St.
Denver, CO 80210

ATTN: Clayton Camozzi

Dana #1-22

22-5s-30w Decatur,KS

Start Date: 2022.08.16 @ 23:44:00

End Date: 2022.08.17 @ 03:41:36

Job Ticket #: 68981 DST #: 2

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2022.08.19 @ 17:02:43



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Black Oak Exploration LLC

22-5s-30w Decatur,KS

1474 S St Paul St.
Denver, CO 80210

Dana #1-22

Job Ticket: 68981

DST#: 2

ATTN: Clayton Camozzi

Test Start: 2022.08.16 @ 23:44:00

GENERAL INFORMATION:

Formation: **LKC "D"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 01:32:06

Time Test Ended: 03:41:36

Test Type: Conventional Bottom Hole (Reset)

Tester: James Winder

Unit No: 73

Interval: 3928.00 ft (KB) To 3952.00 ft (KB) (TVD)

Reference Elevations: 2855.00 ft (KB)

Total Depth: 3952.00 ft (KB) (TVD)

2850.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 6771 Inside

Press@RunDepth: psig @ 3929.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2022.08.16

End Date: 2022.08.17

Last Calib.: 2022.08.17

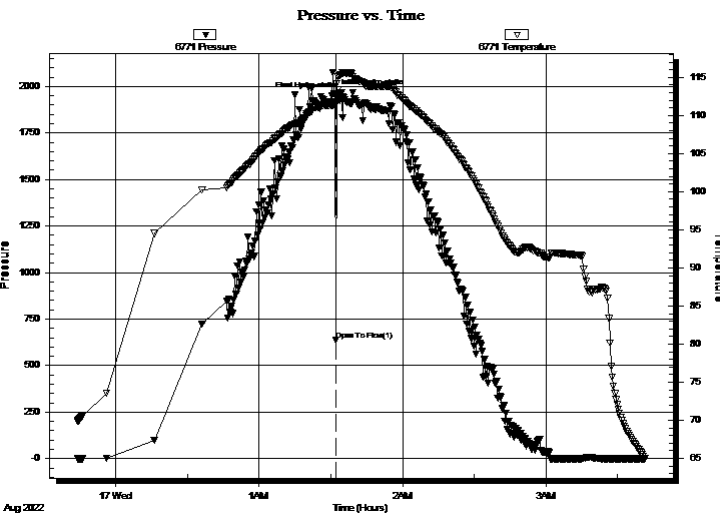
Start Time: 23:44:01

End Time: 03:41:36

Time On Btm: 2022.08.17 @ 01:31:51

Time Off Btm: 2022.08.17 @ 01:35:06

TEST COMMENT: Packer Failure
Pulled tool



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1960.05	111.40	Initial Hydro-static
1	635.60	111.48	Open To Flow (1)
4	1944.75	115.66	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
239.00	Mud 100%	1.18

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Black Oak Exploration LLC

22-5s-30w Decatur,KS

1474 S St Paul St.
Denver, CO 80210

Dana #1-22

Job Ticket: 68981

DST#: 2

ATTN: Clayton Camozzi

Test Start: 2022.08.16 @ 23:44:00

Tool Information

Drill Pipe:	Length: 3676.00 ft	Diameter: 3.80 inches	Volume: 51.56 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 239.00 ft	Diameter: 2.25 inches	Volume: 1.18 bbl	Weight to Pull Loose: 65000.00 lb
			<u>Total Volume: 52.74 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 62000.00 lb
Depth to Top Packer:	3928.00 ft			Final 63000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	24.00 ft			
Tool Length:	57.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3896.00	
Shut In Tool	5.00			3901.00	
Hydraulic tool	5.00			3906.00	
Jars	5.00			3911.00	
EM Tool	4.00			3915.00	
Safety Joint	3.00			3918.00	
Packer	5.00			3923.00	33.00 Bottom Of Top Packer
Packer	5.00			3928.00	
Stubb	1.00			3929.00	
Recorder	0.00	6771	Inside	3929.00	
Recorder	0.00	8367	Outside	3929.00	
Perforations	20.00			3949.00	
Bullnose	3.00			3952.00	24.00 Bottom Packers & Anchor

Total Tool Length: 57.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Black Oak Exploration LLC

22-5s-30w Decatur,KS

1474 S St Paul St.
Denver, CO 80210

Dana #1-22

Job Ticket: 68981

DST#: 2

ATTN: Clayton Camozzi

Test Start: 2022.08.16 @ 23:44:00

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: 73.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.36 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 600.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
239.00	Mud 100%	1.175

Total Length: 239.00 ft Total Volume: 1.175 bbl

Num Fluid Samples: 0

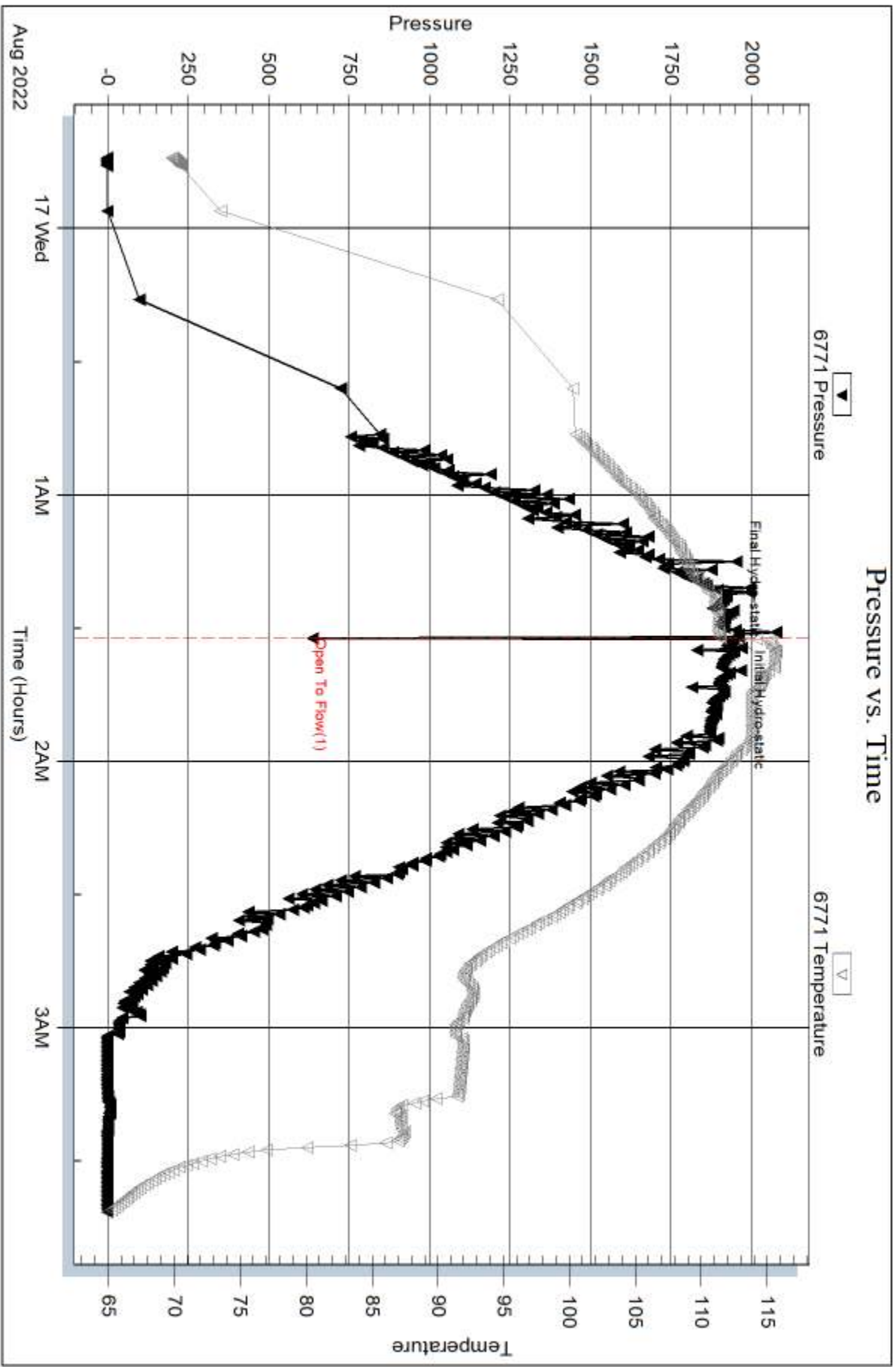
Num Gas Bombs: 0

Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments:

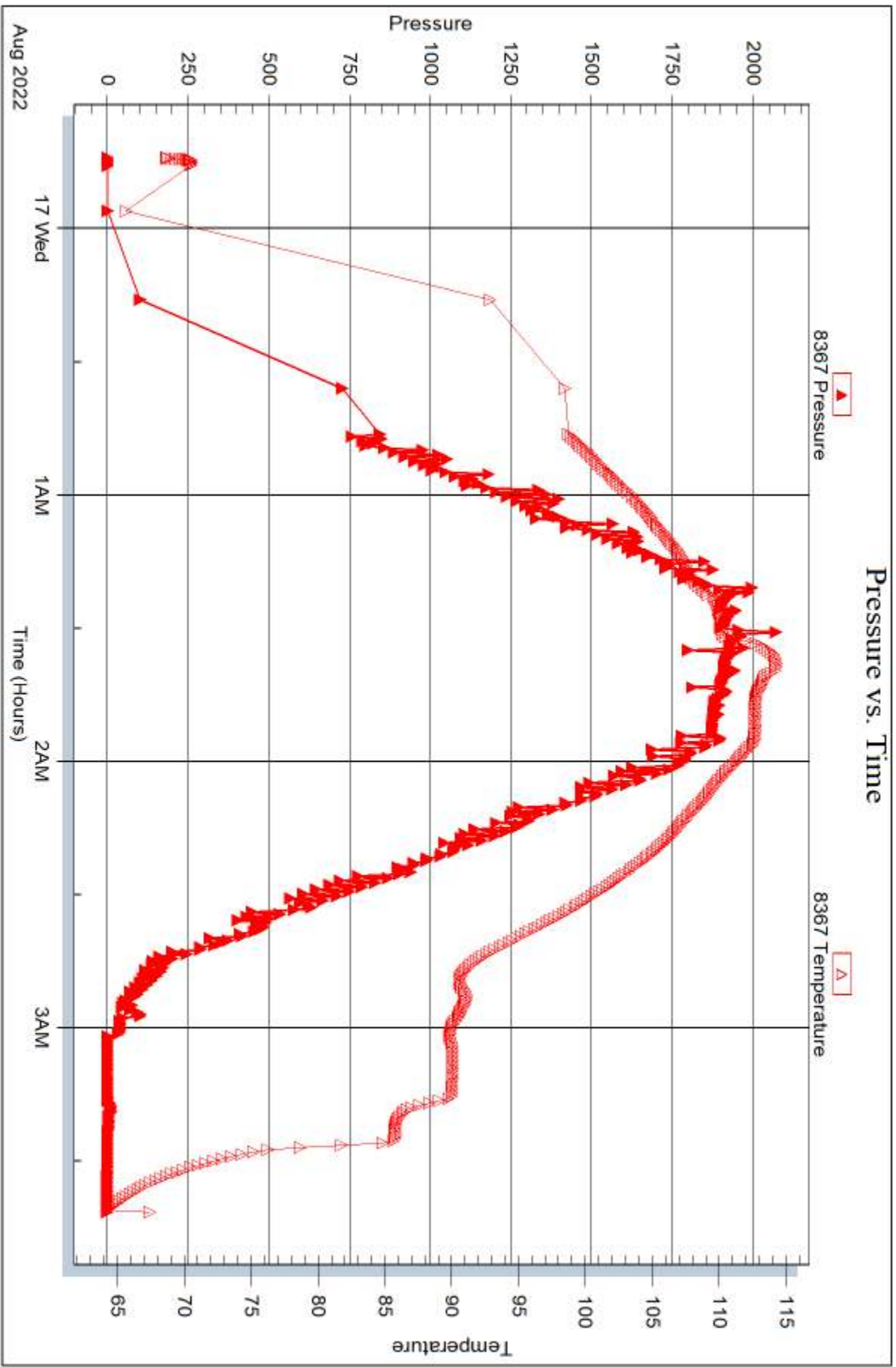


Serial #: 8367

Outside Black Oak Exploration LLC

Dana #1-22

DST Test Number: 2





DRILL STEM TEST REPORT

Prepared For: **Black Oak Exploration LLC**

1474 S St Paul St.
Denver, CO 80210

ATTN: Clayton Camozzi

Dana #1-22

22-5s-30w Decatur,KS

Start Date: 2022.08.17 @ 04:05:00

End Date: 2022.08.17 @ 10:21:21

Job Ticket #: 68982 DST #: 3

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2022.08.19 @ 17:02:07

Black Oak Exploration LLC
22-5s-30w Decatur,KS
Dana #1-22
DST # 3
LKC "D"
2022.08.17



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Black Oak Exploration LLC

22-5s-30w Decatur, KS

1474 S St Paul St.
Denver, CO 80210

Dana #1-22

Job Ticket: 68982

DST#: 3

ATTN: Clayton Camozzi

Test Start: 2022.08.17 @ 04:05:00

GENERAL INFORMATION:

Formation: **LKC "D"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 05:43:21

Time Test Ended: 10:21:21

Test Type: Conventional Bottom Hole (Reset)

Tester: James Winder

Unit No: 73

Interval: 3906.00 ft (KB) To 3952.00 ft (KB) (TVD)

Reference Elevations: 2855.00 ft (KB)

Total Depth: 3952.00 ft (KB) (TVD)

2850.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 6771

Inside

Press@RunDepth: 236.86 psig @ 3907.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2022.08.17

End Date:

2022.08.17

Last Calib.:

2022.08.17

Start Time: 04:05:01

End Time:

10:21:21

Time On Btm:

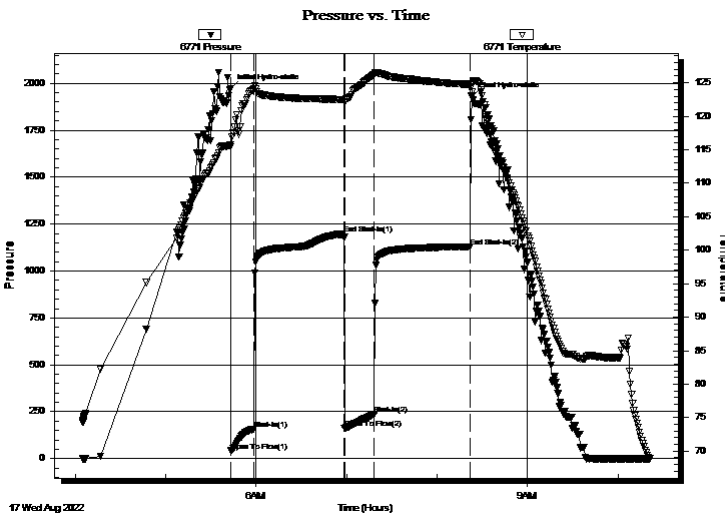
2022.08.17 @ 05:43:06

Time Off Btm:

2022.08.17 @ 08:22:51

TEST COMMENT: 15 - IF: Blow built to BOB (11") at 13 min.
60 - IS!: No blow back
20 - FF: Blow built to 5" (found loose hose at 15 min.)
60 - FS!: No blow back

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1970.32	115.79	Initial Hydro-static
1	40.86	115.48	Open To Flow (1)
16	158.24	124.08	Shut-In (1)
75	1196.70	122.51	End Shut-In (1)
76	160.51	122.17	Open To Flow (2)
96	236.86	126.26	Shut-In (2)
159	1130.01	124.67	End Shut-In (2)
160	1929.69	123.13	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
239.00	MCW 71%w, 29%m	1.18
230.00	WCM 76%m, 24%w	3.23

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Black Oak Exploration LLC

22-5s-30w Decatur, KS

1474 S St Paul St.
Denver, CO 80210

Dana #1-22

Job Ticket: 68982

DST#: 3

ATTN: Clayton Camozzi

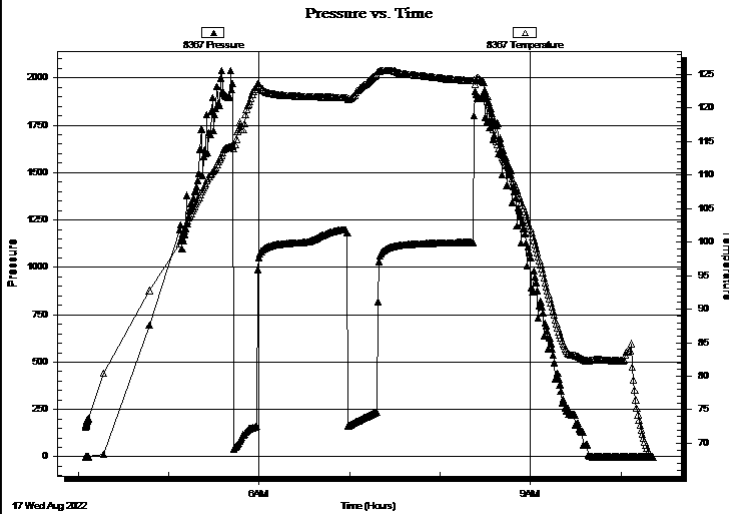
Test Start: 2022.08.17 @ 04:05:00

GENERAL INFORMATION:

Formation: **LKC "D"**
 Deviated: No Whipstock: ft (KB)
 Test Type: Conventional Bottom Hole (Reset)
 Time Tool Opened: 05:43:21
 Tester: James Winder
 Time Test Ended: 10:21:21
 Unit No: 73
 Interval: **3906.00 ft (KB) To 3952.00 ft (KB) (TVD)**
 Reference Elevations: 2855.00 ft (KB)
 Total Depth: 3952.00 ft (KB) (TVD)
 2850.00 ft (CF)
 Hole Diameter: 7.88 inches
 Hole Condition: Fair
 KB to GR/CF: 5.00 ft

Serial #: 8367 Outside
 Press@RunDepth: psig @ 3907.00 ft (KB) Capacity: 8000.00 psig
 Start Date: 2022.08.17 End Date: 2022.08.17 Last Calib.: 2022.08.17
 Start Time: 04:05:01 End Time: 10:21:06 Time On Btm:
 Time Off Btm:

TEST COMMENT: 15 - IF: Blow built to BOB (11") at 13 min.
 60 - ISI: No blow back
 20 - FF: Blow built to 5" (found loose hose at 15 min.)
 60 - FSI: No blow back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
239.00	MCW 71%w, 29%m	1.18
230.00	WCM 76%m, 24%w	3.23

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Black Oak Exploration LLC

22-5s-30w Decatur,KS

1474 S St Paul St.
Denver, CO 80210

Dana #1-22

Job Ticket: 68982

DST#: 3

ATTN: Clayton Camozzi

Test Start: 2022.08.17 @ 04:05:00

Tool Information

Drill Pipe:	Length: 3644.00 ft	Diameter: 3.80 inches	Volume: 51.12 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 239.00 ft	Diameter: 2.25 inches	Volume: 1.18 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 52.30 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	10.00 ft			String Weight: Initial 62000.00 lb
Depth to Top Packer:	3906.00 ft			Final 65000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	46.00 ft			
Tool Length:	79.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			3874.00	
Shut In Tool	5.00			3879.00	
Hydraulic tool	5.00			3884.00	
Jars	5.00			3889.00	
EM Tool	4.00			3893.00	
Safety Joint	3.00			3896.00	
Packer	5.00			3901.00	33.00 Bottom Of Top Packer
Packer	5.00			3906.00	
Stubb	1.00			3907.00	
Recorder	0.00	6771	Inside	3907.00	
Recorder	0.00	8367	Outside	3907.00	
Perforations	5.00			3912.00	
Blank Spacing	34.00			3946.00	
Perforations	3.00			3949.00	
Bullnose	3.00			3952.00	46.00 Bottom Packers & Anchor

Total Tool Length: 79.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Black Oak Exploration LLC

22-5s-30w Decatur,KS

1474 S St Paul St.
Denver, CO 80210

Dana #1-22

Job Ticket: 68982

DST#: 3

ATTN: Clayton Camozzi

Test Start: 2022.08.17 @ 04:05:00

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:

23000 ppm

Viscosity: 73.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.37 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 600.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
239.00	MCW 71%w , 29%m	1.175
230.00	WCM 76%m, 24%w	3.226

Total Length: 469.00 ft Total Volume: 4.401 bbl

Num Fluid Samples: 0

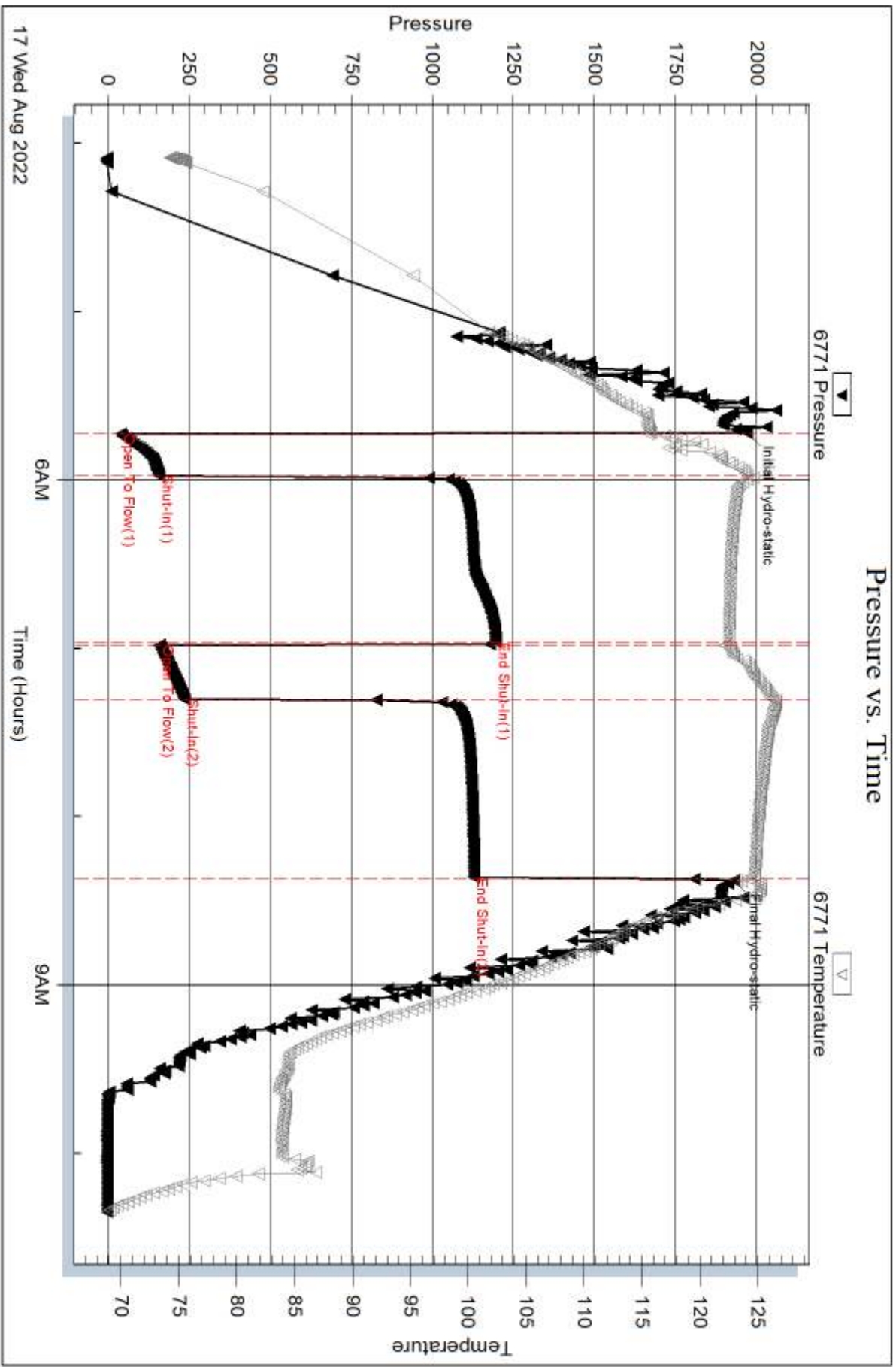
Num Gas Bombs: 0

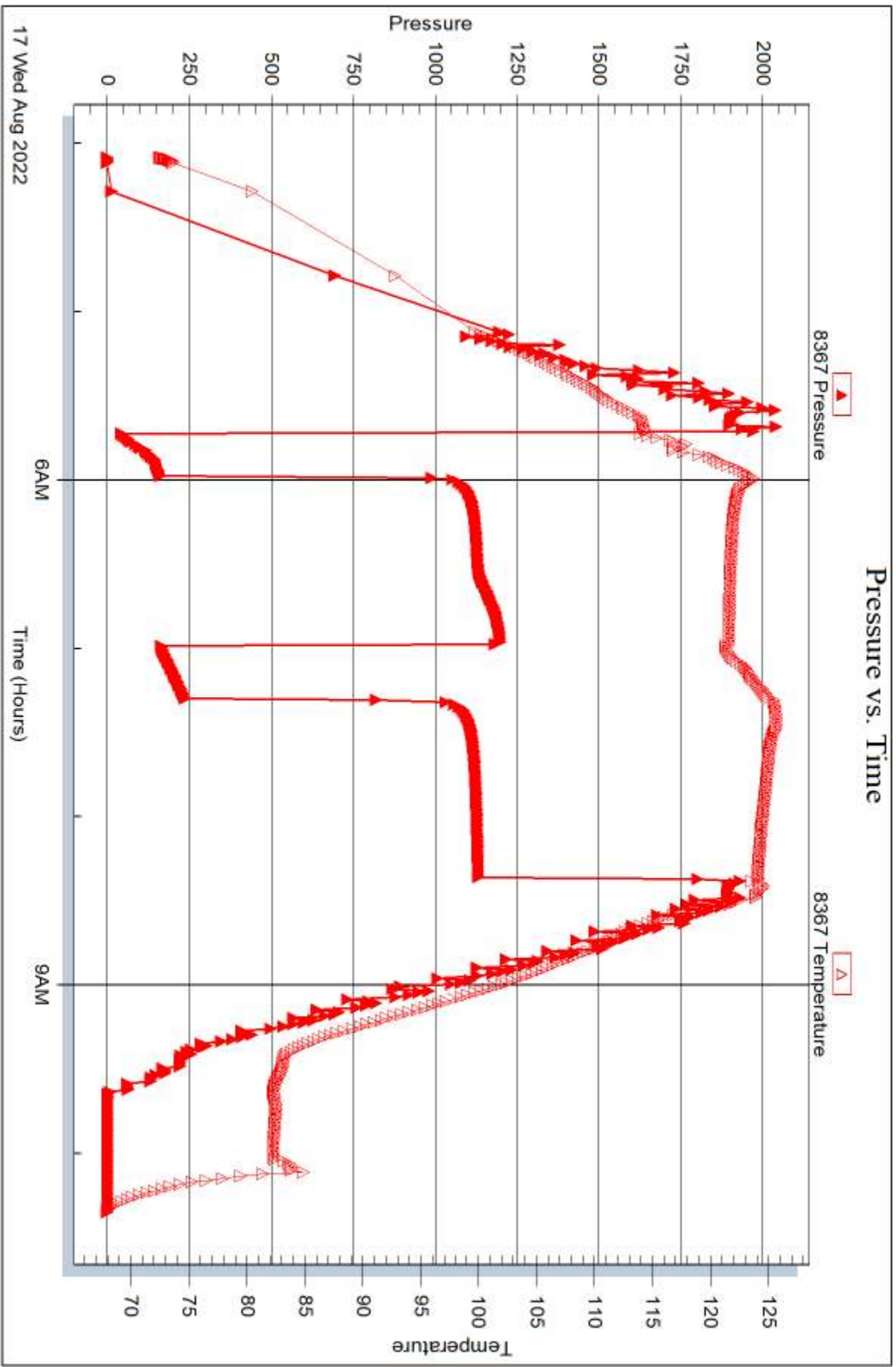
Serial #:

Laboratory Name:

Laboratory Location:

Recovery Comments: RW = .321 ohms @ 64.6 deg F Chlorides = 23,000 ppm







DRILL STEM TEST REPORT

Prepared For: **Black Oak Exploration LLC**

1474 S St Paul St.
Denver, CO 80210

ATTN: Clayton Camozzi

Dana #1-22

22-5s-30w Decatur,KS

Start Date: 2022.08.18 @ 05:12:00

End Date: 2022.08.18 @ 10:34:36

Job Ticket #: 68983 DST #: 4

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2022.08.19 @ 17:01:25



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

Black Oak Exploration LLC

22-5s-30w Decatur, KS

1474 S St Paul St.
Denver, CO 80210

Dana #1-22

Job Ticket: 68983

DST#: 4

ATTN: Clayton Camozzi

Test Start: 2022.08.18 @ 05:12:00

GENERAL INFORMATION:

Formation: **LKC "J - K"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 07:03:06

Time Test Ended: 10:34:36

Test Type: Conventional Bottom Hole (Reset)

Tester: James Winder

Unit No: 73

Interval: 4048.00 ft (KB) To 4085.00 ft (KB) (TVD)

Reference Elevations: 2855.00 ft (KB)

Total Depth: 4085.00 ft (KB) (TVD)

2850.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 6771 Inside

Press@RunDepth: 18.43 psig @ 4049.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2022.08.18

End Date:

2022.08.18

Last Calib.:

2022.08.18

Start Time: 05:12:01

End Time:

10:34:36

Time On Btm:

2022.08.18 @ 07:02:51

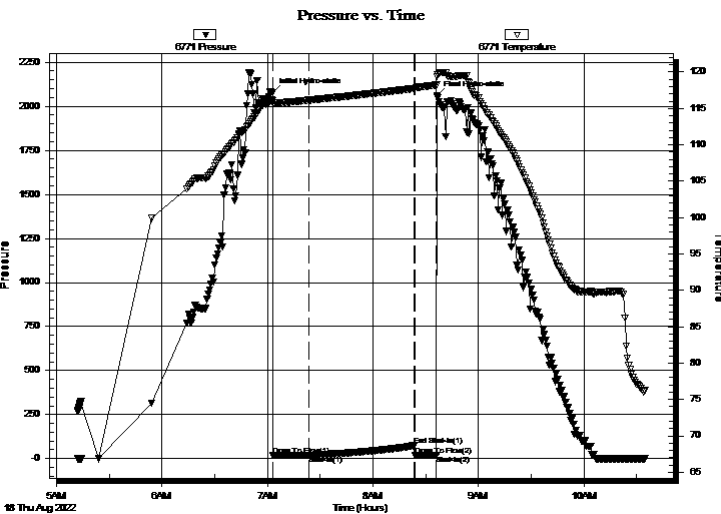
Time Off Btm:

2022.08.18 @ 08:36:36

TEST COMMENT: 20 - IF: Blow built to and stayed at 1/4"

60 - IS: No blow

10 - FF: No blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2075.89	116.11	Initial Hydro-static
1	18.14	115.77	Open To Flow (1)
21	18.43	116.14	Shut-In(1)
81	72.98	117.73	End Shut-In(1)
81	18.82	117.76	Open To Flow (2)
94	19.16	118.22	Shut-In(2)
94	2058.17	119.39	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud w /trace oil 100%m	0.02

* Recovery from multiple tests

Gas Rates

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



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Black Oak Exploration LLC

22-5s-30w Decatur, KS

1474 S St Paul St.
Denver, CO 80210

Dana #1-22

Job Ticket: 68983

DST#: 4

ATTN: Clayton Camozzi

Test Start: 2022.08.18 @ 05:12:00

GENERAL INFORMATION:

Formation: **LKC "J - K"**
Deviated: No Whipstock: ft (KB) Test Type: Conventional Bottom Hole (Reset)
Time Tool Opened: 07:03:06 Tester: James Winder
Time Test Ended: 10:34:36 Unit No: 73
Interval: 4048.00 ft (KB) To 4085.00 ft (KB) (TVD) Reference Elevations: 2855.00 ft (KB)
Total Depth: 4085.00 ft (KB) (TVD) 2850.00 ft (CF)
Hole Diameter: 7.88 inches Hole Condition: Fair KB to GR/CF: 5.00 ft

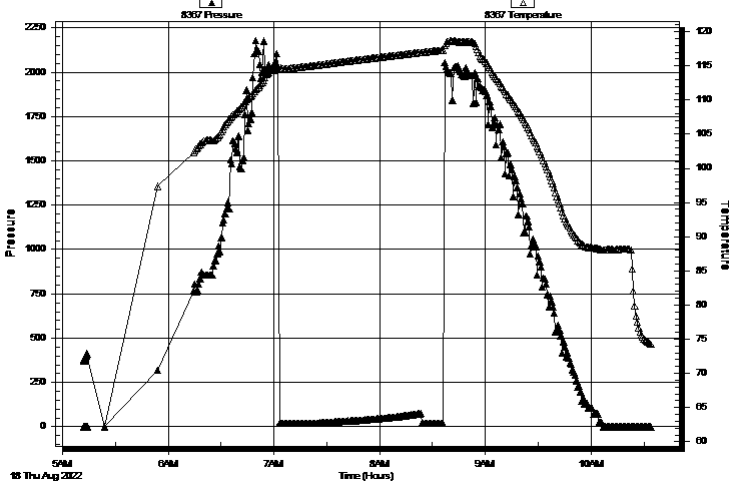
Serial #: 8367

Outside

Press@RunDepth: psig @ 4049.00 ft (KB) Capacity: 8000.00 psig
Start Date: 2022.08.18 End Date: 2022.08.18 Last Calib.: 2022.08.18
Start Time: 05:12:01 End Time: 10:34:21 Time On Btm:
Time Off Btm:

TEST COMMENT: 20 - IF: Blow built to and stayed at 1/4"
60 - ISI: No blow
10 - FF: No blow

Pressure vs. Time



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
5.00	Mud w /trace oil 100%m	0.02

Gas Rates

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

* Recovery from multiple tests



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Black Oak Exploration LLC

22-5s-30w Decatur,KS

1474 S St Paul St.
Denver, CO 80210

Dana #1-22

Job Ticket: 68983

DST#: 4

ATTN: Clayton Camozzi

Test Start: 2022.08.18 @ 05:12:00

Tool Information

Drill Pipe:	Length: 3802.00 ft	Diameter: 3.80 inches	Volume: 53.33 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer: 20000.00 lb
Drill Collar:	Length: 239.00 ft	Diameter: 2.25 inches	Volume: 1.18 bbl	Weight to Pull Loose: 70000.00 lb
			<u>Total Volume: 54.51 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	26.00 ft			String Weight: Initial 63000.00 lb
Depth to Top Packer:	4048.00 ft			Final 63000.00 lb
Depth to Bottom Packer:	ft			
Interval between Packers:	37.00 ft			
Tool Length:	70.00 ft			
Number of Packers:	2	Diameter: 6.75 inches		

Tool Comments:

Tool Description

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
Change Over Sub	1.00			4016.00	
Shut In Tool	5.00			4021.00	
Hydraulic tool	5.00			4026.00	
Jars	5.00			4031.00	
EM Tool	4.00			4035.00	
Safety Joint	3.00			4038.00	
Packer	5.00			4043.00	33.00 Bottom Of Top Packer
Packer	5.00			4048.00	
Stubb	1.00			4049.00	
Recorder	0.00	6771	Inside	4049.00	
Recorder	0.00	8367	Outside	4049.00	
Perforations	33.00			4082.00	
Bullnose	3.00			4085.00	37.00 Bottom Packers & Anchor

Total Tool Length: 70.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Black Oak Exploration LLC

22-5s-30w Decatur,KS

1474 S St Paul St.
Denver, CO 80210

Dana #1-22

Job Ticket: 68983

DST#: 4

ATTN: Clayton Camozzi

Test Start: 2022.08.18 @ 05:12:00

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: 67.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.37 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 800.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
5.00	Mud w /trace oil 100%m	0.025

Total Length: 5.00 ft Total Volume: 0.025 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

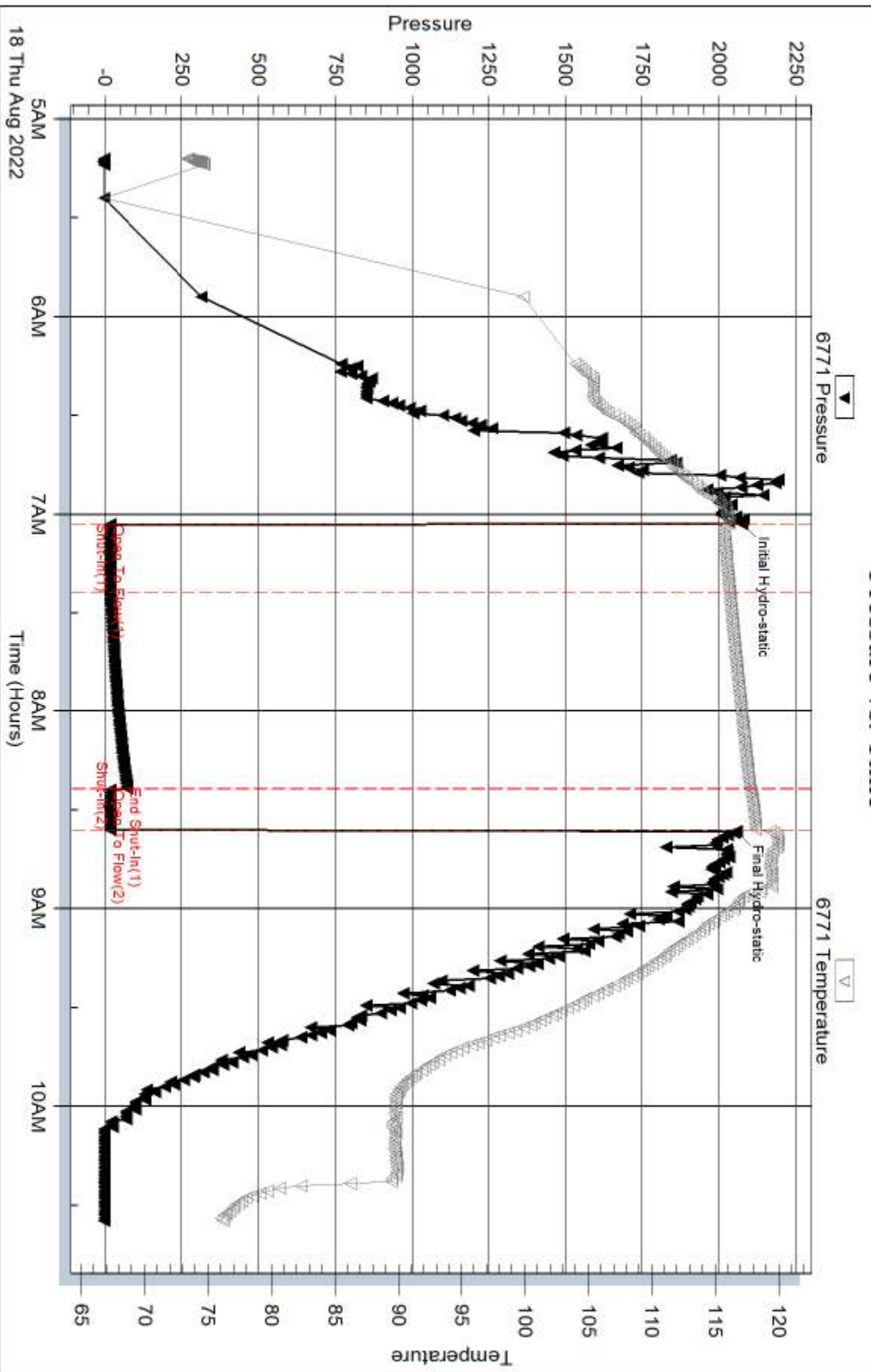
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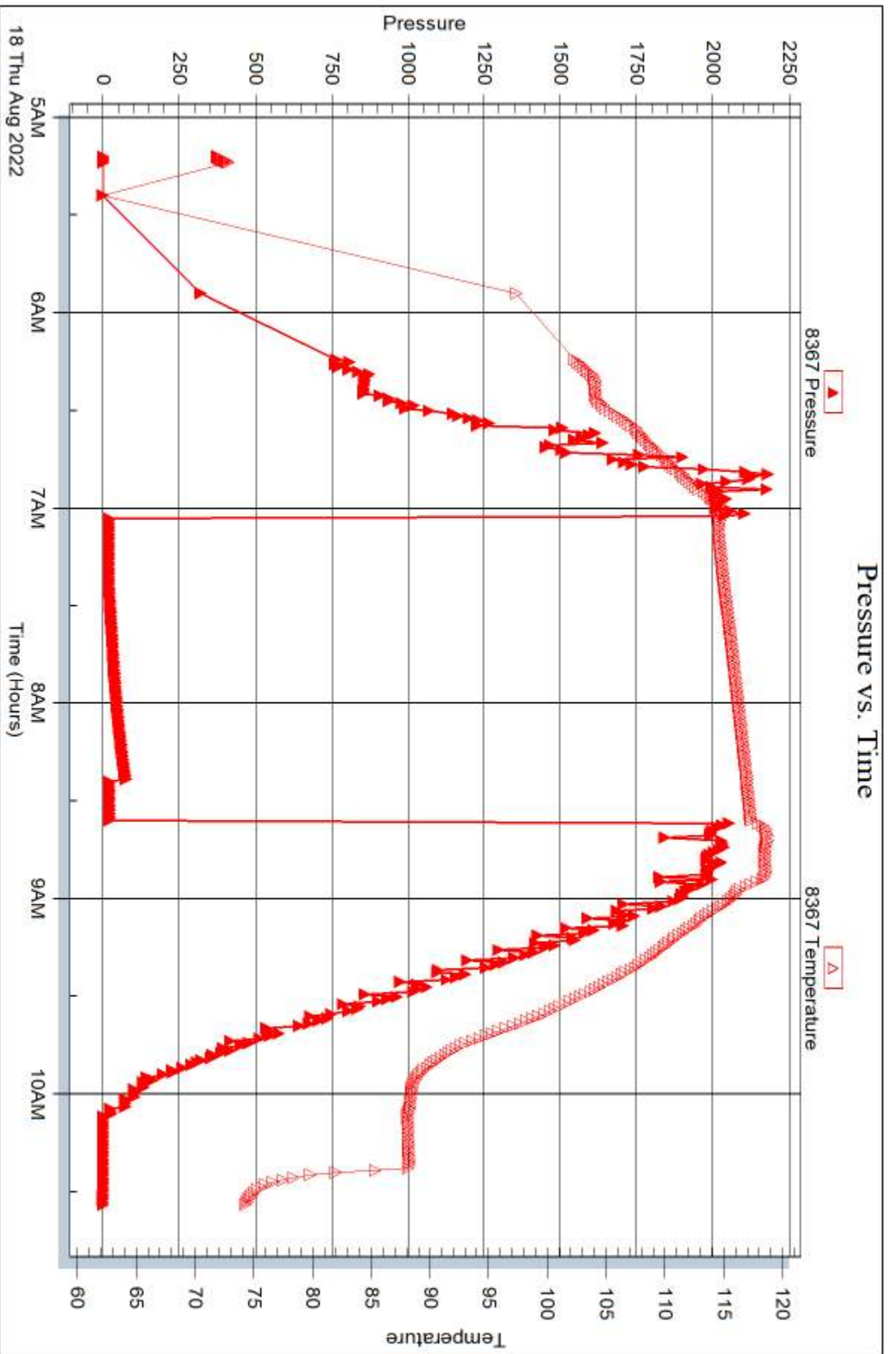
Laboratory Name:

Laboratory Location:

Recovery Comments:

Pressure vs. Time







DRILL STEM TEST REPORT

Prepared For: **Black Oak Exploration LLC**

1474 S St Paul St.
Denver, CO 80210

ATTN: Clayton Camozzi

Dana #1-22

22-5s-30w Decatur,KS

Start Date: 2022.08.19 @ 07:52:00

End Date: 2022.08.19 @ 13:23:36

Job Ticket #: 68984 DST #: 5

Trilobite Testing, Inc
PO Box 362 Hays, KS 67601
ph: 785-625-4778 fax: 785-625-5620

Printed: 2022.08.19 @ 17:00:47



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Black Oak Exploration LLC

22-5s-30w Decatur, KS

1474 S St Paul St.
Denver, CO 80210

Dana #1-22

Job Ticket: 68984

DST#: 5

ATTN: Clayton Camozzi

Test Start: 2022.08.19 @ 07:52:00

GENERAL INFORMATION:

Formation: **LKC "F - G"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:51:36

Time Test Ended: 13:23:36

Test Type: Conventional Straddle (Reset)

Tester: James Winder

Unit No: 73

Interval: 3956.00 ft (KB) To 3984.00 ft (KB) (TVD)

Reference Elevations: 2855.00 ft (KB)

Total Depth: 4180.00 ft (KB) (TVD)

2850.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 6771

Inside

Press@RunDepth: 33.26 psig @ 3956.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2022.08.19

End Date:

2022.08.19

Last Calib.:

2022.08.19

Start Time: 07:52:01

End Time:

13:23:36

Time On Btm:

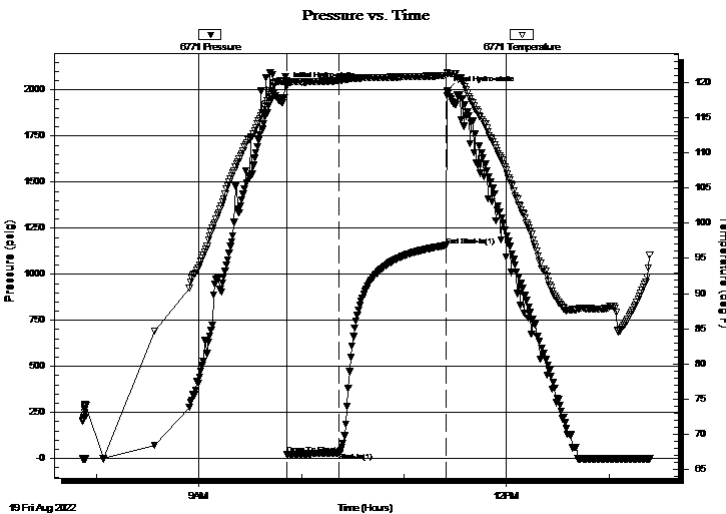
2022.08.19 @ 09:51:21

Time Off Btm:

2022.08.19 @ 11:25:21

TEST COMMENT: 30 - IF: Blow built to 1/4", died back to surface blow
60 - IS: No blow
Pulled tools

PRESSURE SUMMARY



Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	2019.21	120.24	Initial Hydro-static
1	20.77	119.80	Open To Flow (1)
31	33.26	120.30	Shut-In(1)
94	1156.33	120.97	End Shut-In(1)
94	1995.38	121.41	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
45.00	SOCM 95% m, 5% o	0.22

Gas Rates

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

* Recovery from multiple tests



TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

Black Oak Exploration LLC

22-5s-30w Decatur, KS

1474 S St Paul St.
Denver, CO 80210

Dana #1-22

Job Ticket: 68984

DST#: 5

ATTN: Clayton Camozzi

Test Start: 2022.08.19 @ 07:52:00

GENERAL INFORMATION:

Formation: **LKC "F - G"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:51:36

Time Test Ended: 13:23:36

Test Type: Conventional Straddle (Reset)

Tester: James Winder

Unit No: 73

Interval: 3956.00 ft (KB) To 3984.00 ft (KB) (TVD)

Reference Elevations: 2855.00 ft (KB)

Total Depth: 4180.00 ft (KB) (TVD)

2850.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8367 Outside

Press@RunDepth: psig @ 3956.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2022.08.19 End Date: 2022.08.19

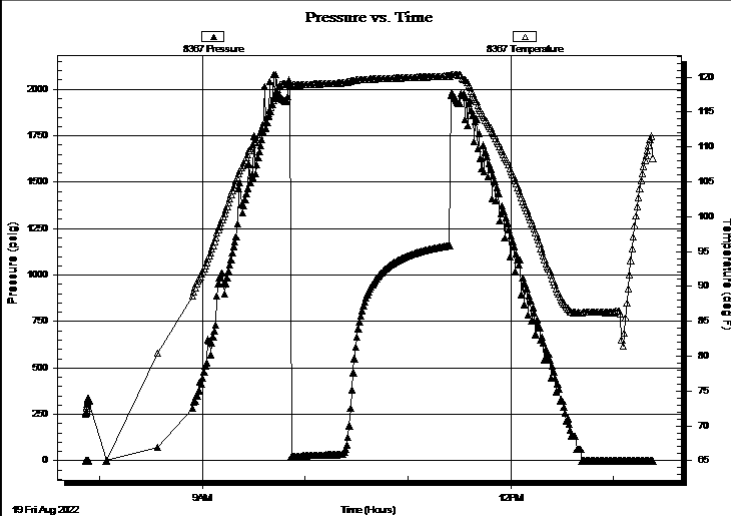
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Start Time: 07:52:01 End Time: 13:22:51

Time On Btm:

Time Off Btm:

TEST COMMENT: 30 - IF: Blow built to 1/4", died back to surface blow
60 - IS: No blow
Pulled tools



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
45.00	SOCM 95% m, 5% o	0.22

Gas Rates

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

* Recovery from multiple tests



TRILOBITE
TESTING, INC

DRILL STEM TEST REPORT

Black Oak Exploration LLC

22-5s-30w Decatur, KS

1474 S St Paul St.
Denver, CO 80210

Dana #1-22

Job Ticket: 68984

DST#: 5

ATTN: Clayton Camozzi

Test Start: 2022.08.19 @ 07:52:00

GENERAL INFORMATION:

Formation: **LKC "F - G"**

Deviated: No Whipstock: ft (KB)

Time Tool Opened: 09:51:36

Time Test Ended: 13:23:36

Test Type: Conventional Straddle (Reset)

Tester: James Winder

Unit No: 73

Interval: 3956.00 ft (KB) To 3984.00 ft (KB) (TVD)

Reference Elevations: 2855.00 ft (KB)

Total Depth: 4180.00 ft (KB) (TVD)

2850.00 ft (CF)

Hole Diameter: 7.88 inches Hole Condition: Fair

KB to GR/CF: 5.00 ft

Serial #: 8700 Below (Straddle)

Press@RunDepth: psig @ 3984.00 ft (KB)

Capacity: 8000.00 psig

Start Date: 2022.08.19 End Date: 2022.08.19

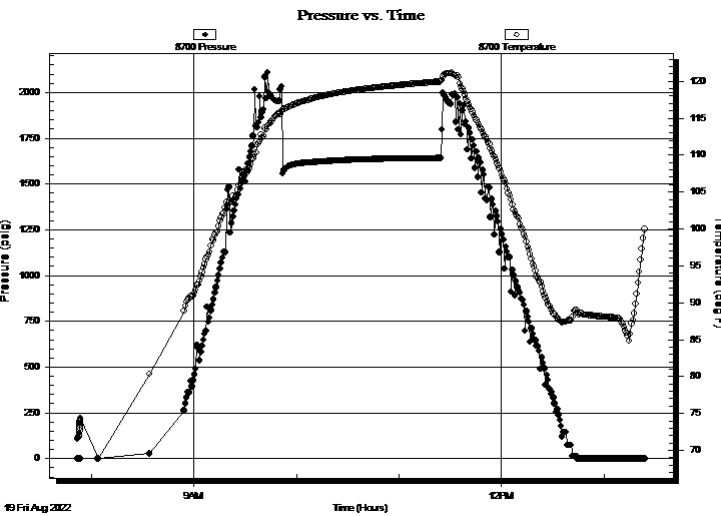
Last Calib.: 2022.08.19

Start Time: 07:52:01 End Time: 13:23:51

Time On Btm:

Time Off Btm:

TEST COMMENT: 30 - IF: Blow built to 1/4", died back to surface blow
60 - ISI: No blow
Pulled tools



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation

Recovery

Length (ft)	Description	Volume (bbl)
45.00	SOCM 95% m, 5% o	0.22

* Recovery from multiple tests

Gas Rates

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



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

TOOL DIAGRAM

Black Oak Exploration LLC

22-5s-30w Decatur,KS

1474 S St Paul St.
Denver, CO 80210

Dana #1-22

Job Ticket: 68984

DST#: 5

ATTN: Clayton Camozzi

Test Start: 2022.08.19 @ 07:52:00

Tool Information

Drill Pipe:	Length: 3704.00 ft	Diameter: 3.80 inches	Volume: 51.96 bbl	Tool Weight: 2500.00 lb
Heavy Wt. Pipe:	Length: 0.00 ft	Diameter: 2.75 inches	Volume: 0.00 bbl	Weight set on Packer: 25000.00 lb
Drill Collar:	Length: 239.00 ft	Diameter: 2.25 inches	Volume: 1.18 bbl	Weight to Pull Loose: 75000.00 lb
			<u>Total Volume: 53.14 bbl</u>	Tool Chased 0.00 ft
Drill Pipe Above KB:	20.00 ft			String Weight: Initial 65000.00 lb
Depth to Top Packer:	3956.00 ft			Final 65000.00 lb
Depth to Bottom Packer:	3983.00 ft			
Interval between Packers:	27.00 ft			
Tool Length:	256.00 ft			
Number of Packers:	3	Diameter: 6.75 inches		

Tool Comments:

Tool Description	Length (ft)	Serial No.	Position	Depth (ft)	Accum. Lengths
------------------	-------------	------------	----------	------------	----------------

Change Over Sub	1.00			3924.00	
Shut In Tool	5.00			3929.00	
Hydraulic tool	5.00			3934.00	
Jars	5.00			3939.00	
EM Tool	4.00			3943.00	
Safety Joint	3.00			3946.00	
Packer	5.00			3951.00	33.00 Bottom Of Top Packer
Packer	5.00			3956.00	
Recorder	0.00	6771	Inside	3956.00	
Recorder	0.00	8367	Outside	3956.00	
Perforations	22.00			3978.00	
Blank Off Sub	1.00			3979.00	
Blank Spacing	4.00			3983.00	27.00 Tool Interval
Packer	0.00			3983.00	
Packer - Shale	0.00			3983.00	
Stubb	1.00			3984.00	
Recorder	0.00	8700	Below	3984.00	
Perforations	2.00			3986.00	
Blank Spacing	190.00			4176.00	
Bullnose	3.00			4179.00	196.00 Bottom Packers & Anchor

Total Tool Length: 256.00



**TRILOBITE
TESTING, INC**

DRILL STEM TEST REPORT

FLUID SUMMARY

Black Oak Exploration LLC

22-5s-30w Decatur,KS

1474 S St Paul St.
Denver, CO 80210

Dana #1-22

Job Ticket: 68984

DST#: 5

ATTN: Clayton Camozzi

Test Start: 2022.08.19 @ 07:52:00

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:

ppm

Viscosity: 71.00 sec/qt

Cushion Volume:

bbbl

Water Loss: 6.80 in³

Gas Cushion Type:

Resistivity: ohm.m

Gas Cushion Pressure:

psig

Salinity: 1200.00 ppm

Filter Cake: 2.00 inches

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
45.00	SOCM 95% _m , 5% _o	0.221

Total Length: 45.00 ft Total Volume: 0.221 bbl

Num Fluid Samples: 0

Num Gas Bombs: 0

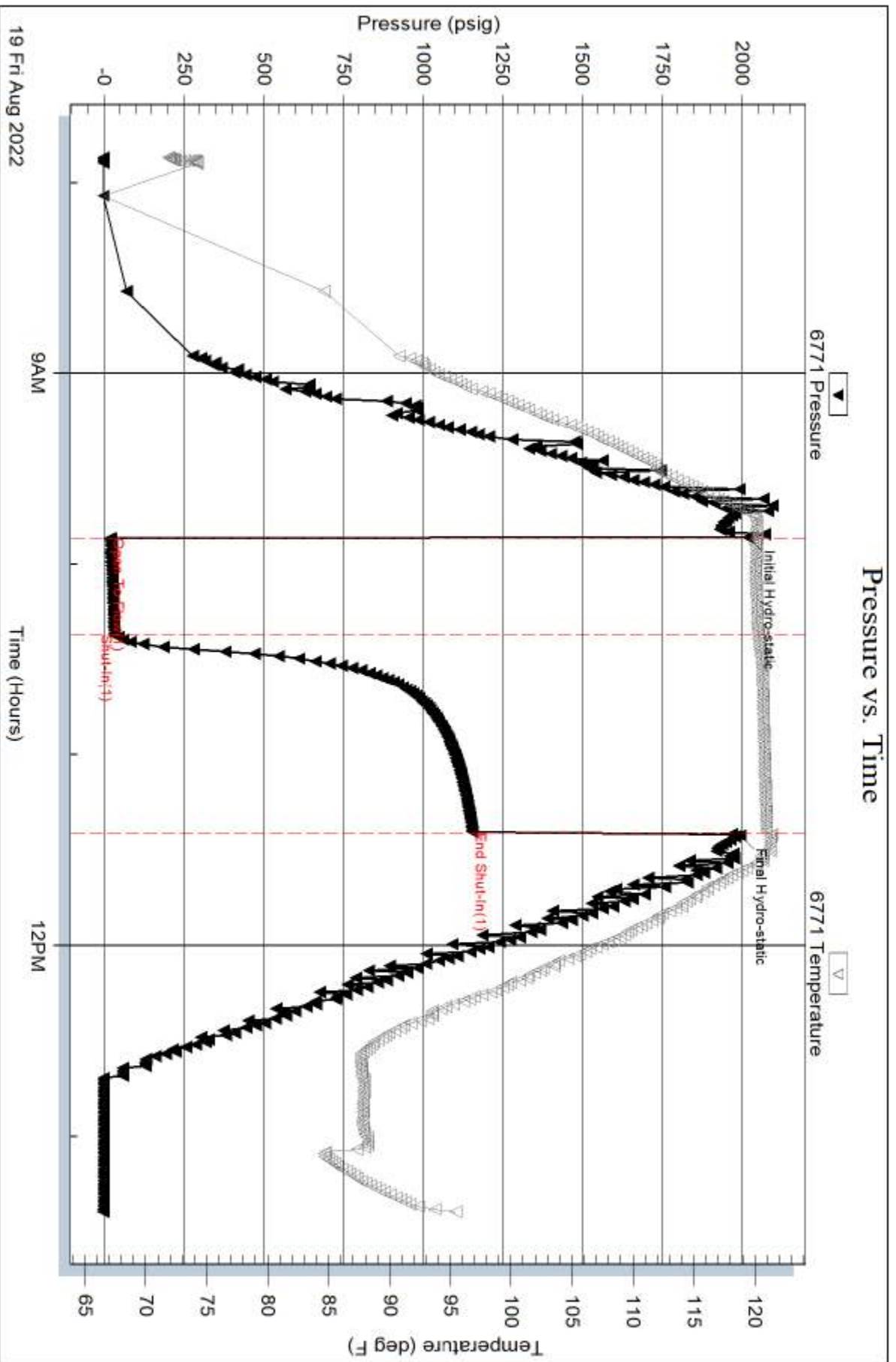
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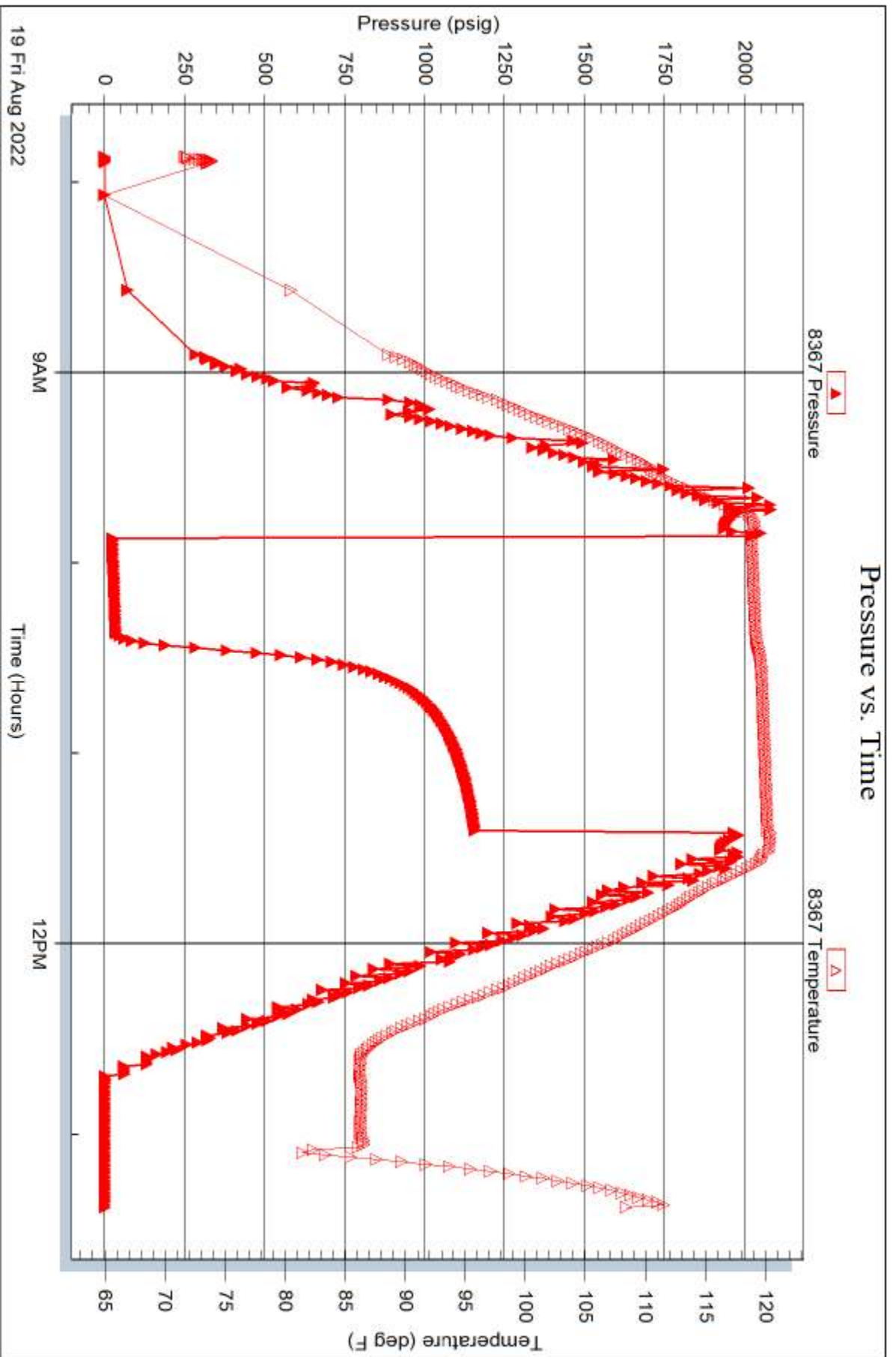
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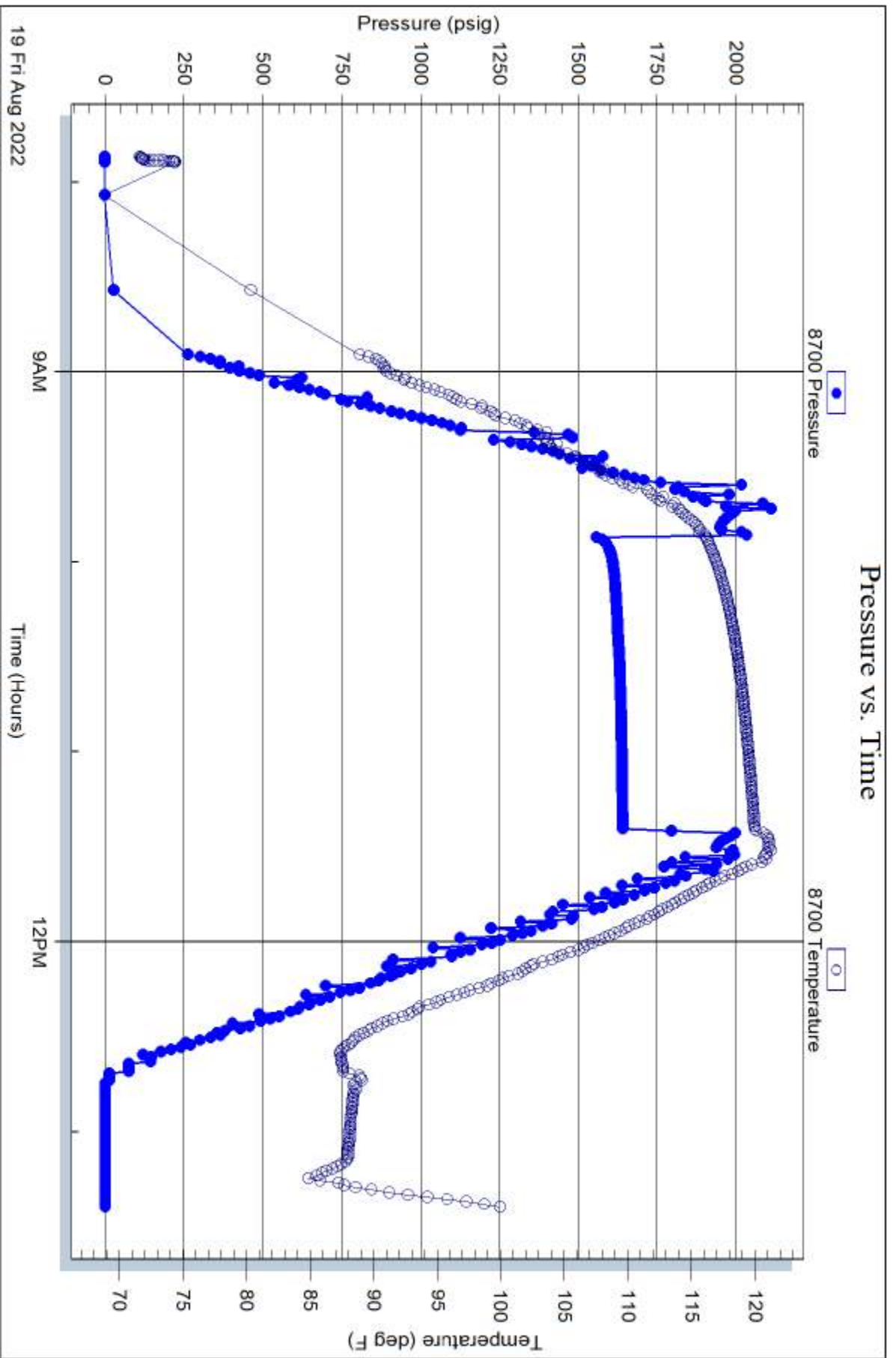
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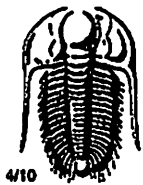
Recovery Comments:

Pressure vs. Time









TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 68980

Well Name & No. Dana #1-22 Test No. 1 Date 8-16-22
 Company Black Oak Exploration LLC Elevation 2855 KB 2850 GL
 Address 1474 S St Paul St. Denver, CO 80210
 Co. Rep / Geo. Clayton Camozzi Rig Murfin #7
 Location: Sec. 22 Twp 5s Rge. 30w Co. Decatur State KS

Interval Tested 3887 - 3930 Zone Tested Lans "A-C"
 Anchor Length 43 Drill Pipe Run 3643 Mud Wt. 9.0
 Top Packer Depth 3882 Drill Collars Run 239 Vis 73
 Bottom Packer Depth 3887 Wt. Pipe Run - WL 6.4
 Total Depth 3930 Chlorides 600 ppm System LCM 4
 Blow Description IF: 1/8" blow at open, built to and stayed at 3/4"
ISI: No blow
Pulled tool

Rec	Feet of	%gas	%oil	%water	%mud
<u>59</u>	<u>mud</u>			<u>100</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 59 BHT 118 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 1938 Test 1800 T-On Location 8:50
 (B) First Initial Flow 19 Jars 300 T-Started 9:40
 (C) First Final Flow 45 Safety Joint _____ T-Open 11:39
 (D) Initial Shut-In 1209 Circ Sub _____ T-Pulled 13:11
 (E) Second Initial Flow - Hourly Standby _____ T-Out 15:15
 (F) Second Final Flow - Mileage 52RT 78 Comments _____
 (G) Final Shut-In _____ Sampler _____
 (H) Final Hydrostatic 1914 Straddle _____ EM Tool _____
 Initial Open 30 Shale Packer _____ Ruined Shale Packer _____
 Initial Shut-In 60 Extra Packer _____ Ruined Packer _____
 Final Flow - Extra Recorder _____ Extra Copies _____
 Final Shut-In _____ Day Standby _____ Sub Total 0
 Sub Total 2178 Accessibility _____ Total 2178
 Sub Total 2178 MP/DST Disc't _____

Approved By _____ Our Representative James Winkler
 TriLOBITE TESTING INC. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 68981

Well Name & No. Dana #1-22 Test No. 2 Date 8-17-22
 Company Black Oak Exploration LLC Elevation 2855 KB 2850 GL
 Address 1474 S St Paul St Denver, CO 80210
 Co. Rep / Geo. Clayton Camozzi Rig Murfin #7
 Location: Sec. 22 Twp 5s Rge. 30w Co. Decatur State KS

Interval Tested 3928 - 3952 Zone Tested Lans "D"
 Anchor Length 24 Drill Pipe Run 3676 Mud Wt. 9.0
 Top Packer Depth 3923 Drill Collars Run 239 Vis 73
 Bottom Packer Depth 3928 Wt. Pipe Run - WL 6.4
 Total Depth 3952 Chlorides 600 ppm System LCM 4
 Blow Description Packer Failure
Pulled tool

Rec	Feet of	%gas	%oil	%water	%mud
<u>239</u>	<u>Mud</u>			<u>100</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 239 BHT 116 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic _____ Test 1350 T-On Location 23:00 8/16
 (B) First Initial Flow _____ Jars 300 T-Started 23:44
 (C) First Final Flow _____ Safety Joint _____ T-Open 1:32
 (D) Initial Shut-In _____ Circ Sub _____ T-Pulled 1:35
 (E) Second Initial Flow _____ Hourly Standby _____ T-Out 3:35 8/17
 (F) Second Final Flow _____ Mileage 52 RT 78 Comments _____
 (G) Final Shut-In _____ Sampler _____
 (H) Final Hydrostatic _____ Straddle _____ EM Tool _____
 Ruined Shale Packer _____
 Ruined Packer _____
 Extra Packer _____
 Extra Recorder _____
 Extra Copies _____
 Day Standby _____
 Accessibility _____
 Sub Total 1728 Sub Total 1728 MP/DST Disc't _____

Approved By _____ Our Representative James Winder
 Trilobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 68982

Well Name & No. Dana #1-22 Test No. 3 Date 8-17-22
 Company Black Oak Exploration LLC Elevation 2855 KB 2850 GL
 Address 1474 S St Paul St Denver, CO 80210
 Co. Rep / Geo. Clayton Camozzi Rig Murfin #7
 Location: Sec. 22 Twp 5s Rge. 30w Co. Decatur State KS

Interval Tested 3906 - 3952 Zone Tested Lans. "D"
 Anchor Length 46 Drill Pipe Run 3644 Mud Wt. 9.0
 Top Packer Depth 3901 Drill Collars Run 239 Vis 73
 Bottom Packer Depth 3906 Wt. Pipe Run - WL 6.4
 Total Depth 3952 Chlorides 600 ppm System LCM 4

Blow Description IF: Blow built to BOB (11") at 13 min.
ISI: No blowback
FF: Blow built to 5" (Found loose hose at 15 min)
FSI: No blowback

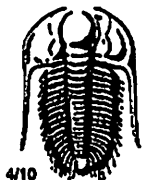
Rec	Feet of	%gas	%oil	%water	%mud
<u>230</u>	<u>WCM</u>		<u>24</u>	<u>76</u>	
<u>239</u>	<u>MCW</u>		<u>71</u>	<u>29</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 469 BHT 125 Gravity API RW 321 @ 64.6°F Chlorides 23,000 ppm
 (A) Initial Hydrostatic 1970 Test 1800 T-On Location 3:50
 (B) First Initial Flow 41 Jars 300 T-Started 4:05
 (C) First Final Flow 158 Safety Joint T-Open 5:43
 (D) Initial Shut-In 1197 Circ Sub T-Pulled 8:21
 (E) Second Initial Flow 161 Hourly Standby T-Out 10:20
 (F) Second Final Flow 237 Mileage NA Comments _____
 (G) Final Shut-In 1130 Sampler _____
 (H) Final Hydrostatic 1930 Straddle _____ EM Tool -175

Initial Open 15 Shale Packer _____ Ruined Shale Packer _____
 Initial Shut-In 60 Extra Packer _____ Ruined Packer _____
 Final Flow 20 Extra Recorder _____ Extra Copies _____
 Final Shut-In 60 Day Standby _____ Sub Total -175
 Sub Total 2100 Accessibility _____ Total 1925
 MP/DST Disc't _____

Approved By _____ Our Representative James Nichols

TriLOBITE TESTING INC. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



TRIBOLITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 68983

Well Name & No. Dana #1-22 Test No. 4 Date 8-18-22
 Company Black Oak Exploration LLC Elevation 2855 KB 2850 GL
 Address 1474 S St Paul St Denver CO 80210
 Co. Rep / Geo. Clayton Camozzi Rig Murfin #7
 Location: Sec. 22 Twp 5s Rge. 30w Co. Decatur State Ks

Interval Tested 4048-4085 Zone Tested Lans "J-K"
 Anchor Length 37 Drill Pipe Run 3802 Mud Wt. 9.1
 Top Packer Depth 4043 Drill Collars Run 239 Vis 67
 Bottom Packer Depth 4048 Wt. Pipe Run - WL 6.4
 Total Depth 4085 Chlorides 800 ppm System LCM 4
 Blow Description IF: Blow built to and stayed at 1/4"
ISI: No blow
FF: No blow

Pulled tools

Rec	Feet of	%gas	%oil	%water	%mud
<u>5</u>	<u>Mud w/trace oil</u>	<u>trace</u>		<u>100</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

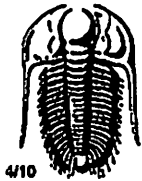
Rec Total 5 BHT 118 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 2076 Test 1950 T-On Location 4:20
 (B) First Initial Flow 18 Jars 250 T-Started 5:12
 (C) First Final Flow 18 Safety Joint _____ T-Open 7:03
 (D) Initial Shut-In 73 Circ Sub _____ T-Pulled 8:36
 (E) Second Initial Flow 19 Hourly Standby _____ T-Out 10:30
 (F) Second Final Flow 19 Mileage 52RT 78 Comments _____
 (G) Final Shut-In _____ Sampler _____
 (H) Final Hydrostatic 2058 Straddle _____ EM Tool _____

Initial Open 20
 Initial Shut-In 60
 Final Flow 10
 Final Shut-In -

Ruined Shale Packer _____
 Ruined Packer _____
 Extra Copies _____
 Sub Total 0
 Total 2328
 MP/DST Disc't _____

Approved By _____ Our Representative James Winkler
 Tribolite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.



TRIOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 68984

Well Name & No. Dana #1-22 Test No. 5 Date 8-19-22
 Company Black Oak Exploration LLC Elevation 2855 KB 2850 GL
 Address 1474 S St Paul St. Denver CO 80210
 Co. Rep / Geo. Clayton Camozzi Rig Murfin #7
 Location: Sec. 22 Twp 5S Rge. 30W Co. Decatur State KS

Interval Tested 3956-3984 Zone Tested 2 1/2" Lans. F-6"
 Anchor Length 28 Anchor 196 Tq. 1 Drill Pipe Run 3704 Mud Wt. 9.2
 Top Packer Depth 3951-3956 Drill Collars Run 239 Vis 71
 Bottom Packer Depth 3984 (shale) Wt. Pipe Run - WL 6.8
 Total Depth 4180 Chlorides 1200 ppm System LCM 4
 Blow Description IF: Blow built to 1/4", died back to surface blow
ISI: No blow
Pulled tools

Rec	Feet of	%gas	%oil	%water	%mud
<u>45</u>	<u>500m</u>	<u>5</u>		<u>95</u>	
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud
Rec	Feet of	%gas	%oil	%water	%mud

Rec Total 45 BHT 121 Gravity _____ API RW _____ @ _____ °F Chlorides _____ ppm

(A) Initial Hydrostatic 2019 Test 1950 T-On Location 7:05
 (B) First Initial Flow 21 Jars 300 T-Started 7:52
 (C) First Final Flow 33 Safety Joint _____ T-Open 9:51
 (D) Initial Shut-In 1156 Circ Sub _____ T-Pulled 11:24
 (E) Second Initial Flow _____ Hourly Standby _____ T-Out 13:20
 (F) Second Final Flow _____ Mileage 52 RT 78 Comments _____
 (G) Final Shut-In _____ Sampler _____ EM Tool _____
 (H) Final Hydrostatic 1995 Straddle 600 Ruined Shale Packer _____
 Shale Packer _____ Ruined Packer _____
 Extra Packer _____ Extra Copies _____
 Extra Recorder _____ Sub Total 0
 Day Standby _____ Total 2928
 Accessibility _____ Sub Total 2928 MP/DST Disc't _____

Approved By _____ Our Representative James Winkler
 Triobite Testing Inc. shall not be liable for damaged of any kind of the property or personnel of the one for whom a test is made, or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statements or opinion concerning the results of any test, tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.

Black Oak Exploration, LLC

WELL COMPARISON SHEET

Company: Black Oak Exploration, LLC
 1474 S St Paul St
 Denver, CO 80210

Well: Dana 1-22
 Location: 340 FSL / 300 FEL 22- 5S - 30W
 Decatur Co. KS

Elevation: 2858' GL 2863' KB
 Field: Wildcat
 API No: 15-039-21284-0000
 Surface Casing: 8 5/8" set @ 262' KB

Contact: Clayton Camozzi 303-968-4999 (Cell)

Wellsite Geologist: Tim Hedrick Cell: (580) 754-0062

Drilling Contractor: Murfin Drilling Co Rig #7. Rig Phone (785-443-5616), Tool Pusher Arturo Cabezas (785-443-0495)

DRILLING WELL					COMPARISON WELL				COMPARISON WELL			
Dana 1-22					DJ 1-22				Wessel 1-26			
340 FSL / 300 FEL 22- 5S - 30W					2380 FSL / 1085 FWL 22 - 5S - 30W				1665 FNL / 2290 FEL 26 - 5S - 30W			
2854 KB					2881 KB		Structural Relationship		2863 KB		Structural Relationship	
Formation	Sample	Sub-Sea	Log	Sub-Sea	Log	Sub-Sea	Sample	Log	Log	Sub-Sea	Sample	Log
Stone Corral	2572	282	2573	281	2599	282	0	-1	2591	272	10	9
Topeka	3670	-816	3688	-834	3707	-826	10	-8	3709	-846	30	12
LeCompton	3778	-924	3797	-943	3816	-935	11	-8	3822	-959	35	16
Heebner	3848	-994	3858	-1004	3879	-998	4	-6	3882	-1019	25	15
Lansing	3896	-1042	3904	-1050	3925	-1044	2	-6	3930	-1067	25	17
Lansing C	3921	-1067	3932	-1078	3952	-1071	4	-7	3956	-1093	26	15
Lansing F	3964	-1110	3972	-1118	3996	-1115	5	-3	3996	-1133	23	15
Lansing H	4008	-1154	4016	-1162	4041	-1160	6	-2	4038	-1175	21	13
Lansing J	4046	-1192	4054	-1200	4078	-1197	5	-3	4076	-1213	21	13
Lansing K	4072	-1218	4078	-1224	4103	-1222	4	-2	4102	-1239	21	15
BKC	4107	-1253	4112	-1258	4138	-1257	4	-1	4135	-1272	19	14
Total Depth	4180	-1326	4180	-1326	4240	-1359	33	33	4230	-1367	41	41