KOLAR Document ID: 1693490

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 # 32705
Name: Raney Oil Company, LLC
Address 1: 4665 BAUER BROOK CT.
Address 2:
City: LAWRENCE State: KS Zip: 66049 + 9013
Contact Person: Tom Raney
Phone: (785) 749-0672
CONTRACTOR: License # 32701
Name: C & G Drilling, Inc.
Wellsite Geologist: Roger Martin
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 #:

10/17/2022 Spud Date or Recompletion Date
10/23/2022 Date Reached TD
10/24/2022 Completion Date or Recompletion Date

API No.: 15-035-24763-00-00
Spot Description:
NE - SW - SW - NE Sec. 5 Twp. 34 S. R. 6 ☑ East ☐ West
3072 Feet from ☐ North / ☑ South Line of Section
2274 Feet from ☑ East / ☐ West Line of Section
Footages Calculated from Nearest Outside Section Corner:
☐ NE ☐ NW ☑ SE ☐ SW
GPS Location: Lat: *(e.g. xx.xxxxx)* , Long: *(e.g. -xxx.xxxxx)*
Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84
County: Cowley
Lease Name: HOUSE 5 Well #: A
Field Name: Rahn Oil Field
Producing Formation: Mississippi
Elevation: Ground: 1215 Kelly Bushing: 1224
Total Vertical Depth: 3341 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 302 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: 5000 ppm Fluid volume: 500 bbls
Dewatering method used: Evaporated
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:** David Befort **Date:** 02/17/2023

Operator Name: Raney Oil Company, LLC Lease Name: HOUSE 5 Well #: A

Sec. 5 Twp. 34 S. R. 6 ☑ East ☐ West County: Cowley

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 *(Attach Additional Sheets)*	☑ Yes	☐ No
Samples Sent to Geological Survey	☑ Yes	☐ No
Cores Taken	☐ Yes	☑ No
Electric Log Run	☑ Yes	☐ No
Geologist Report / Mud Logs	☑ Yes	☐ No

List All E. Logs Run:
Attached

☑ Log Formation (Top), Depth and Datum ☐ Sample

Name	Top	Datum
Iatan	1734	-510
Upper Layton	2213	-692
Fort Scott	2725	-1501
Mississipian	3017	-1793
RTD	3341	-2117

CASING RECORD ☑ New ☐ 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
Surface	12.25	8.625	23	302	Class A	180	3%CC2%Gel

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
☐ Perforate ☐ Protect Casing ☐ Plug Back TD ☐ 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: ☐ Flowing ☐ Pumping ☐ Gas Lift ☐ Other *(Explain)*

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

DISPOSITION OF GAS:	METHOD OF COMPLETION:	PRODUCTION INTERVAL:
☐ Vented ☐ Sold ☐ Used on Lease *(If vented, Submit ACO-18.)*	☐ Open Hole ☐ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)*	Top / Bottom

Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record *(Amount and Kind of Material Used)*

TUBING RECORD: Size: Set At: Packer At:

Mail to: KCC - Conservation Division, 266 N. Main, Suite 220, Wichita, Kansas 67202

Form	ACO1 - Well Completion
Operator	Raney Oil Company, LLC
Well Name	HOUSE 5 A
Doc ID	1693490

All Electric Logs Run

DIL
MEL
PE
SON

Form	ACO1 - Well Completion
Operator	Raney Oil Company, LLC
Well Name	HOUSE 5 A
Doc ID	1693490

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Surface	12.25	8.625	23	302	Class A	180	3%CC2% Gel

810 E 7TH
PO Box 92
EUREKA, KS 67045
(620) 583-5561

ELITE
CEMENTING & ACID SERVICE, LLC

Cement or Acid Field Report
Ticket No. **6775**
Foreman David Gardner
Camp Eureka

API # 15-035-24763

Date	Cust. ID #	Lease & Well Number	Section	Township	Range	County	State
10-23-22	1375	House #5A	5	34S.	6E.	Cowley	KS

Customer: RA Energy, LLC
Mailing Address: 11615 Rosewood St. Ste 100
City: Leawood | State: KS | Zip Code: 66211

Safety Meeting: DG JH DK

Unit #	Driver	Unit #	Driver
105	Jason		
114	Dan		

Job Type P.T.A. New Well | Hole Depth 3339' K.B. | Slurry Vol. | Tubing
Casing Depth 302' G.L. | Hole Size 7 7/8" | Slurry Wt. 14# | Drill Pipe 4 1/2" 16.60#
Casing Size & Wt. 8 5/8" 23# | Cement Left in Casing | Water Gal/SK | Other
Displacement | Displacement PSI | Bump Plug to | BPM

Remarks: Safety Meeting: Rig up to 4 1/2" 16.60# Drill pipe. Plug well as follows:

35 SKS @ 350'
25 SKS @ 60' to Surface
30 SKS R.H.
20 SKS M.H.
110 SKS Total

Code	Qty or Units	Description of Product or Services	Unit Price	Total
C103W	1	Pump Charge	1495.00	1495.00
C107	60	Mileage	5.00	300.00
C203	110 SKS	60/40 Pozmix Cement	15.75	1732.50
C206	380#	Gel 4%	.30	114.00
C108B	4.73 Tons	Ton Mileage - 60 Miles	1.40	425.70
		Thank You	Sub Total	4,067.20
			Less 5%	209.36
		6.5 %	Sales Tax	120.02
			Total	3,977.86

Authorization _____ Title _____

I agree to the payment terms and conditions of services provided on the back of this job ticket. Any amendments to payment terms must be in writing on the front of this job ticket or in the Customer's records at ELITE's office.

810 E 7TH
PO Box 92
EUREKA, KS 67045
(620) 583-5561

ELITE CEMENTING & ACID SERVICE, LLC

C&G Drlg Rig 2

Cement or Acid Field Report

Ticket No. **6796**

Foreman Kevin McCoy

Camp Eureka

API # 15-035-24763

Date	Cust. ID #	Lease & Well Number	Section	Township	Range	County	State
10-18-22	1375	House #5 A	5	34S	6E	Cowley	Ks

Customer	Safety Meeting	Unit #	Driver	Unit #	Driver
RA Energy, LLC	KM SF SM	104	Shannon F.		
Mailing Address: 11615 Rosewood St. Ste 100		112	Steve M.		
City: Leawood / State: Ks / Zip Code: 66211					

Job Type Surface — Hole Depth 320' K.B. — Slurry Vol. 43 BBL — Tubing

Casing Depth 302' G.L. — Hole Size 12¼" — Slurry Wt. 15# — Drill Pipe

Casing Size & Wt. 8⅝" 23# — Cement Left in Casing 20' ± — Water Gal/SK — Other

Displacement 18.5 BBL — Displacement PSI — Bump Plug to — BPM

Remarks: Safety Meeting: Rig up to 8⅝ Casing. Break Circulation w/ 10 BBL Fresh water. Mixed 180 sks Class "A" Cement w/ 3% CaCl2, 2% Gel, ¼# Floseal/sk @ 15#/gal = 43 BBL Slurry. Displace w/ 18.5 BBL fresh water. Shut Casing in. Good Cement Returns to Surface = 12 BBL Slurry to Pit. Job Complete. Rig down

Code	Qty or Units	Description of Product or Services	Unit Price	Total
C 101	1	Pump Charge	950.00	950.00
C 107	60	Mileage	5.00	300.00
C 200	180 sks	Class "A" Cement	18.55	3339.00
C 205	510 #	CaCl2 3%	.75#	382.50
C 206	340 #	Gel 2%	.30#	102.00
C 209	45 #	Floseal ¼#/sk	2.80#	126.00
C 108 B	8.46 tons	Ton Mileage 60 miles	1.50	761.40
			Sub Total	5,960.90
		THANK YOU	Less 5%	310.88
		6.5%	Sales Tax	256.72
			Total	5,906.74

Authorization By Willi — Title C&G Drlg Toolpusher

I agree to the payment terms and conditions of services provided on the back of this job ticket. Any amendments to payment terms must be in writing on the front of this job ticket or in the Customer's records at ELITE's office.

ROGER L. MARTIN
INDEPENDENT PETROLEUM GEOLOGIST 316-250-6970

GEOLOGIST'S REPORT
DRILLING TIME AND SAMPLE LOG

COMPANY: RA ENERGY, LLC/ RANEY OIL COMPANY, LLC
LEASE: HOUSE 5 A
FIELD: RAHN
LOCATION: 3072' FSL &2274' FEL
SECTION 5 TOWNSHIP 34S RANGE 06E
COUNTY COWLEY STATE KANSAS

ELEVATIONS
KB 1224' GL 1215'
Measurements Are All From KB
API # 15-035-24763-00-00

CONTRACTOR C&G DRILLING, Rig #2
SPUD 10/17/2022 COMP 10/24/2022
RTD 3339' LTD 3341'
ELECTRICAL SURVEYS
ELI: DIL, CDL/CNL//PE, MEL/SON

CASING
SURFACE 8 5/8" set @ 302' KB.
PRODUCTION n/a- P&A

FORMATION TOPS	LOG	SAMPLES
IATAN	1734' (-510)	1732' (-508)
LWR STALNAKER "HOGSHOOTER"	1916' (-692)	1912' (-688)
UPPER LAYTON SS	2213' (-989)	2211' (-987)
BASE LAYTON SS	2334' (-1110)	2332' (-1108)
KANSAS CITY	2393' (-1169)	2389' (-1065)
DENNIS	2444' (-1220)	2442' (-1218)
SWOPE	2466' (-1242)	2462' (-1238)
HERTHA	2520' (-1296)	2516' (-1293)
BASE KANSAS CITY	2540' (-1316)	2538' (-1314)
MARMATON	2621' (-1397)	2619' (-1395)
ALTAMONT	2636' (-1412)	2640' (-1416)
PAWNEE	2690' (-1466)	2687' (-1463)
FORT SCOTT	2725' (-1501)	2723' (-1499)
CHEROKEE	2762' (-1538)	2761' (-1537)
Erosional MISSISSIPPIAN	3017' (-1793)	3012' (-1788)
MISSISSIPPIAN CHERT	3020' (-1796)	3016' (-1792)
MISSISSIPPIAN LS	3032' (-1808)	3028' (-1804)
COWLEY Facies	3076' (-1852)	3076' (-1852)
RTD/LTD	3341' (-2117)	3339' (-2115)

CHRONOLOGY
- 10/17/2022- MIRU C&G Drilling, Rig #2. SPUD 12 1/4" hole. DTD 320', Run 8 5/8" surface casing, set @ 3002'.
- 10/18/2022- WOC @ 320' @ 10:30 AM.
- 10/19/2022- Drlg @ 1194' @ 10:00 AM.
- 10/20/2022- Drlg @ 2050' @ 8:00 AM.
- 10/21/2022- Circ @ 2217' @ 2:00 PM.
- 10/22/2022- CFS @ 3149' @ 6:30 PM.
- 10/23/2022- @ RTD 3339'. Run E-logs.
- 10/24/2022- P&A

REMARKS:
10/24/2022- The House 5 A test well was P&A pursuant to KCC plugging orders.

Respectfully submitted,
Roger L. Martin, Geologist

LITH | POROSITY | DRILLING TIME MIN/FT | DST | SAMPLE DESCRIPTION | 0 TGV 300

Vgt'd SH & Silts from 1500'-1700' w/ NSO

SH: Vgt'd, Pred gy & sm Silts.

SH- Silts: gy.

[IATAN] Silts: gy, sndy, Vfn Gr'd & calc- lmy- silty, argil LS. — 1732' (-508) IATAN

SH & Silts: gy.

VRr LS: tn-dn-ux & Mdst. Silts: gy, Vfsily sndy & SH: AA.

Silts: lt-md gy, sm sndy, Vfn Gr'd & VSilty, well cmt'd Sd Clast. NSO.

Pred SH: gy-blk.

Pred SH: dk gy-blk, sm md gy, silty SH & Silts.

SH: gy, sm Vsoft clay.

[LOWER STALNAKER] SS- Sd Clast: lt gy-wh, bf, Vfn- fn Gr'd, silty & well cmt'd to subfribl w/ Pred Pr- Rr Fr Poro, Trc FLR- SFO- STN- Cut. — 1912' (-688) LWR STALNAKER (Trc SFO)

SS- Sd Clast: (5%) Vfn- fn Gr'd, well cmt'd to fribl w/ Pr- Fr- VRr Gd Poro, subsat- sat brt yel- gld- wh FLR & Sl- Fr SFO, Sl Odor. Abndt Silty Sd & Sndy Silts w/ VPr- Pr visbl Poro. — (Sl- Fr SFO)

-c-No Spl!

SS- Sd Clast: AA, VRr <5% Sd Clast: Vfn- fn Gr'd, well cmt'd to fribl w/ Pr- Fr- Trc Gd Poro, subsat- sat FLR & Sl- Fr SFO & Sl Odor. — (Sl- Fr SFO)

Trc Sd Clast, AA w/ FLR- SFO.

VAbndt SH: Pred gy-blk, Trc dn & argil LS: argil- shly Wkst- Pkst, sm fos, NSO.

Mud Checks by: Mud Co Serv Mud wt 9.05, vis 39 PV 9, YP 6 pH 11.5, WL 9.6 Cl 2700, LCM 2# ECD 9.85

SH: AA, Trc LS, AA.

SH: Pred dk gy-blk. VRr LS: argil & shly Wkst- Pkst & Mdst.

SH: Pred dk gy & blk, sm carb (Trc Sd Clast, AA w/ FLR- SFO), ~99% SH.

Silts: gy, calc & lmy & sndy- Vfn- fn Gr'd & LS: argil- silty & sndy & LS: tn-gy-wh, Vfsily ux- fos.

Trc Sd Clast AA w/ FLR- SFO- Cut- STN- Odor.

Silts: lt-md gy, micac, sm sndy.

V.Abndt Silt, AA.

-CFS-(-976) -CFS-(-980) -CFS-(-985) -CFS-(-990) -CFS-(-992)

[UPPER LAYTON] SS- Sd Clast: VRr md Gr'd, Pred Vfn- fn Gr'd, md- subangulr, sm silty w/ Pr- Gd Poro, well cmt'd- fribl w/ Fr- Gd SFO- brt subsat- sat FLR & STN, md'd & subangulr Gr's, micac, SS- Sd Clast: AA, Pred Vfn- fn Gr'd, Vfn- md Gr'd, md'd- subanglr, Incrs fribl w/ Fr- Gd Poro; Abndt FLR & OSTN, subsat- sat FLR, STN, Fr- Gd SFO & mlky Cut & Odor. — 2211' (-987) UPPER LAYTON (Fr-Gd SFO) (Fr- Gd SFO)

DST #1 LAYTON 2198'-2216' 30-45-60-90 1st Op: Fr blo, btm @ 3.69", No bb 2nd Op: Wk blo, btm @ 2.83", No bb Rec: 122' TF: 62' SOCM 2%O,98%M 60' SOSMW +/-1%O,45%M 55%W TOOL SPL: +/-1%O,30%M 69%W IHP: 1069 IFP: 70-82 ISIP: 691 FFP: 90-89 FSIP: 678 FHP: 1023 BHT: 98 F

wt 9.0+, vis 45 PV 12, YP 12 pH 11.0, WL 9.6 Cl 1800, LCM 3#

SS- Sd Clast: Lrg, Pred Vfn- fn Gr'd & micac, VRr Gr'd, VRr FLR- SFO- STN & Cut, AA, VSl Odor. Incrs Silty & micac, subfribl to fribl w/ Pr- Gd visbl & aprnt Poro, ~95% barren.

Abndt Silty SS- Sd Clast: lt gy-bf, Pred Vfn- fn Gr'd, micac, fribl w/ Pr- Fr visbl & aprnt Poro, ~99% barren. (Trc Sd Clast, AA w/ FLR- SFO- STN- Cut)

VAbndt Sd Clast: Pred Vfn- fn Gr'd & Silty, sm micac, Rr shly, Rr Vfn- md Gr'd w/ Gd- VGd Poro, Pred Pr- Fr visbl Poro 99% barren w/ NSFO, NF.

[BASE LAYTON] SS: Incrs fn-md Gr'd Sd, but decrs Sd Clast, barren. — 2332' (-1108) B/LAYTON

Abndt SH: gy-blk, fis.

99% SH: dk gy-blk, fis SH, VRr Sd Clast, AA.

SH: AA, lmy, calc SH & LS: Rr Wkst- Pkst, fos & argil, VPr- NV Poro, NS.

SH: AA

Circ 1hr- wk on light plant

-CFS-(-1169)

[KANSAS CITY] LS: dk gy-bn-blk & cm motf'd Pkst & Wkst, VPr- NV Poro, NS, sm dn hd Mdst. — 2389' (-1065) KANSAS CITY

SH: blk carb.

[DODDS CREEK] Silts: gy, Vfsily sndy & silty. SS- Sd Clast: gy, Vfn Gr'd, silty & micac & Pred well cmt'd w/ Pr visbl Poro, Pred barren. VAbndt SS- Sd Clast, AA, ~99% barren, Trc FLR- SFO- STN- Cut. — 2402' (-1178) DODDS CREEK (Trc SFO)

Sd Clast, AA, lt- dk gy, micac, Silts, & SH:

[DENNIS] LS: tn-gy-cm, motf'd Wkst- Pkst, sm fos, Pr- NV Poro, NS. — 2442' (-1218) DENNIS

SH: dk gy-blk carb.

[SWOPE] LS: tn-gy-bn, dn-uxdn & Mdst, sm argil, VPr- NV Poro, NS. — 2462' (-1238) SWOPE

SH: blk subcarb- Vcarb.

sm argil LS & Vgt'd SH, sm calc & lmy, sm clay.

SH: AA & Silts: lt gn-gy.

-WOP-

[HERTHA] LS: tn-gy-cm, motf'd Wkst-Pkst, dn-ux & Mdst, Pr- NV Poro. — 2516' (-1293) HERTHA

SH: blk carb.

sm dn & argil Mdst.

LS: AA, dn, argil- silty.

[BASE KANSAS CITY] Silts: lt-md gy & gn-gy & SH: AA. — 2538' (-1314) B/KANSAS CITY

SH: lt-dk gy.

SH: dk gy- blk, Rr carb SH.

SH: AA, Pred dk gy-blk, subcarb.

[MARMATON] LS: cm-tn & gy, motf'd Wkst- Pkst, sm fos & ux- fnxdn, VPr- Pr visbl Poro: lGr Poro, ulX Poro, <5% w/ SFO- STN- FLR- Cut. — 2619' (-1395) MARMATON (Trc SFO)

SH: AA, blk carb & gy.

[ALTAMONT] LS: tn-gy-cm, sm motf'd Wkst- Pkst, fos & ux- fnx, Pr- Fr ulX Poro & ulGr Poro 10% w/ subsat FLR & VSl- Sl SFO & Cut, VSl Odor. — 2640' (-1416) ALTAMONT (VSl- Sl SFO)

Abndt SH: dk gy-blk, micac & Sl pyrtc, sm blk carb.

[PAWNEE] LS: cm-gy-tn, ux- Vfnxdn & Wkst- Pkst w/ VPr- Pr visbl Poro: ulX Poro, ulGr Poro, pp Poro, 10% <20% w/ spt'd- subsat FLR & VSl- Sl SFO, VSl Odor, sm wh-chlky & subchlky w/ VPr- Pr Poro & FLR & VSl SFO. — 2687' (-1463) PAWNEE (VSl- Sl SFO)

SH: blk carb & gy SH.

[FORT SCOTT] LS: cm-bf-tn, ux- Vfnxdn & sm Wkst- Pkst w/ VPr- Pr visbl Poro: ulX Poro, ulGr Poro, pp Poro, 10% w/ spt'd- subsat FLR, VSl- Sl SFO & mlky Cut, Sl Odor; Ifos Poro w/ FLR- SFO. — 2723' (-1499) FORT SCOTT (VSl- Sl SFO)

SH: blk Vcarb

LS: Pred dn- ux Mdst & sm chlky.

[CHEROKEE] SH: AA, blk Carb. & Silts: gn-gy, sm sndy. — 2761' (-1537) CHEROKEE

VAbndt SH: Pred dk gy-blk, micac.

SH: blk subcarb- carb & sm calc & lmy SH, sm pyrtc, sm gn-gy SH.

LS: gy, argil Mdst.

SH: blk carb & dk gy, micac.

SH: AA.

sm Silts: lt-md gy, sm sndy, Trc Silty Sd Clast.

VRr coal- blk vit.

SH: dk-lt gy, vgt'd, sm blk carb, sm Silts.

SH: Vgt'd, gy & sm blk carb & Rr coal.

Incrs coal, blk vit.

Vgt'd SH: gy & brick red.

SH: AA, Vgt'd lt-dk gy & silty- micac SH.

-CFS-(-1768)

Rr LS: gy-tn, motf'd argil Wkst- Pkst & Mdst.

[Eros. MISSISSIPPIAN] Chert: wh-gy & blk, sm shly Chert w/ SFO- FLR- STN- Cut, wthr'd- Tripolc. — 3012' (-1788) EROS MISS

-CFS-(-1799)

[MISSISSIPPIAN] CHERT: cm-gy-bf-tn & bone wh, wthr'd & sm fos & sub Tripolc- VTripolc w/ Fr- VGd Poro: lGr- Tripolc Poro, spt'd- sat Tn- lm OSTN, Fr- Gd SFO & brt subsat- sat FLR, sm frsh- shrp, opq Chert w/ Trc FLR. — 3016' (-1792) MISS CHERT (Fr-Gd SFO)

[MISSISSIPPIAN] CHERTY LS: gy-bn-tn-wh, motf'd Wkst- Pkst & ux- fnx w/ VPr- Pr visbl Poro: uFrcs & ulX Poro, ulGr Poro, 5% w/ spt'd FLR & VSl- Sl SFO & Cut., sm Sl argil. — 3028' (-1804) MISS LS (VSl- Sl SFO)

-CFS-(-1811)

-CFS-(-1831)

LS: gy-bn-tn-wh, motf'd Wkst- Pkst & ux- mdx w/ VPr- Pr visbl Poro: uFrcs & ulX Poro, ulGr Poro, Trc SFO- FLR- Cut. — (Trc SFO)

[COWLEY] LS: dk gy-bn-blk, sm motf'd, argil, ux, dn, sm dolomc, Trc uFrc & Edgs w/ FLR- Trc SFO & VPr mlky Cut & Resid Cut. — 3076' (-1852) COWLEY Facies (Trc SFO)

-CFS-(-1862)

LS- DLS: gy-bn-blk, ux & Mdst, sm dolomc & sm silic, argil- Vargil w/ VPr- NV Poro, Trc uFrc- Edg FLR, Trc SFO — (Trc SFO)

-CFS-(-1894)

LS- DLS: gy-bn-blk, ux- dn & argil & Vargil- Mdst, sm Sl silic, VPr- NV Poro, Trc uFrc's & Edg's w/ FLR & Trc SFO, Trc mlky Cut & Resid Cut, >99% barren. — (Trc SFO)

wt 9.2+, vis 42 PV 10, YP 12 pH 10.5, WL 8.8 Cl 2200, LCM 6#

-CFS-(-1925)

LS & DLS: Pred dk gy-blk Mdst & dn- uxdn & argil to Vargil w/ VPr- NV Poro, Trc FLR- u Frc & Edg, Trc uspt's F.Oil on brk 99% barren. — (Trc SFO)

LS & DLS: AA, >99% barren.

-CFS-(-1957)

LS: dn, sm silic & argil- Vargil, Mdst & DLS: dk gy-bn-blk, ux, argil w/ VPr- NV Poro, Trc uFrc & Edgs w/ FLR & Trc SFO >99% barren. — (Trc SFO)

-CFS-(-1988)

LS- DLS: dk gy-bn-blk, dn & Vargil Mdst & dn- ux w/ VPr- Pr Poro, VRr <5% w/ uFrc & Edg FLR- Trc SFO & Resid Cut — (Trc SFO)

LS: cm-tn & dk gy-bn cryptox- ux, sm silic & sm dolomc & argil- Vargil Mdst, VPr- NV Poro,Trc uFrc- Edg FLR, Trc uspt's F.Oil on brk & Resid Cut, >99% barren. — (Trc SFO)

-spl- -c- -spl- -spl-

LS- DLS: dk-lt gy & gy-tn & gy-bn-blk, cryptox- ux, Pred dn & argil w/ VPr- NV Poro, Trc uFrc- Edg FLR, Trc show uspt'd F.Oil on brk & VPr Cut. — (Trc SFO)

-spl-

LS: AA. DLS: AA, Incrs shly argil, VRr uFrc's- Edg FLR- Trc SFO, uspt's F.Oil on brk — (Trc SFO)

-spl- -c-

DLS: dk- lt gy & gy-bn- blk, sm motf'd cryptox- uxdn, Pred dn, silic, sm prt argil to Vargil, Pred VPr- NV Poro,VRr 5% w/ spt'd- subsat FLR, Trc SFO on brk & Resid Cut — (Trc SFO)

-CFS-(-2115)

3339' (-2115)/ RTD
3341' (-2117)/ LTD

RAE/RANEY OIL
HOUSE 5A
3072'FSL&2274'FEL
Sec 5-34S-06E
COWLEY CO., KS
15-035-24763

DRILL STEM TEST REPORT

Raney Oil Company LLC

4665 Bauer Brook CT
Lawrence, KS 66049

ATTN: Roger Martin

5-34S-6E Cowley

House 5-A

Job Ticket: 69560 **DST#: 1**

Test Start: 2022.10.20 @ 23:33:00

GENERAL INFORMATION:

Formation: **Uppere Layton**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 01:21:47
Time Test Ended: 07:19:02

Test Type: Conventional Bottom Hole (Initial)
Tester: Leal Cason
Unit No: 72

Interval: 2198.00 ft (KB) To 2216.00 ft (KB) (TVD)
Total Depth: 2216.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

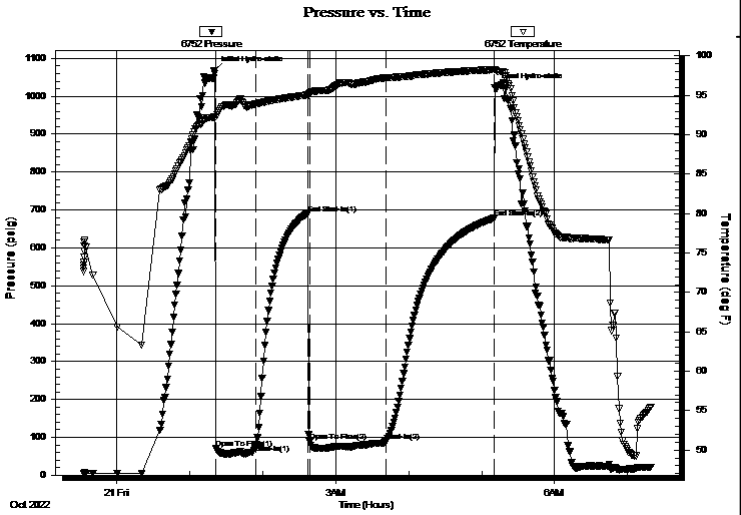
Reference Elevations: 1224.00 ft (KB)
1215.00 ft (CF)
KB to GR/CF: 9.00 ft

Serial #: 6752 **Inside**

Press@RunDepth: 89.36 psig @ 2204.00 ft (KB)
Start Date: 2022.10.20 End Date: 2022.10.21
Start Time: 23:33:01 End Time: 07:19:02

Capacity: psig
Last Calib.: 2022.10.21
Time On Btm: 2022.10.21 @ 01:20:17
Time Off Btm: 2022.10.21 @ 05:10:47

TEST COMMENT: IF: Fair Blow , Built to 3.69"
ISI: No Blow Back
FF: Weak Blow , Built to 2.83"
FSI: No Blow Back



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1068.71	92.22	Initial Hydro-static
2	70.01	92.34	Open To Flow (1)
35	81.80	93.92	Shut-In(1)
77	691.16	95.05	End Shut-In(1)
79	90.33	95.25	Open To Flow (2)
141	89.36	97.24	Shut-In(2)
230	678.19	98.28	End Shut-In(2)
231	1023.00	98.30	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
0.00	Tool Sample SOSMW +\-1%O 30%M 69%	0.00
60.00	SOSMW +\-1%O 44%M 55%W	0.30
62.00	SOCM 2%O 98%M	0.30

Gas Rates

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

DRILL STEM TEST REPORT

Raney Oil Company LLC

4665 Bauer Brook CT
Lawrence, KS 66049

ATTN: Roger Martin

5-34S-6E Cowley

House 5-A

Job Ticket: 69560 **DST#: 1**

Test Start: 2022.10.20 @ 23:33:00

GENERAL INFORMATION:

Formation: **Uppere Layton**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 01:21:47
Time Test Ended: 07:19:02

Test Type: Conventional Bottom Hole (Initial)
Tester: Leal Cason
Unit No: 72

Interval: 2198.00 ft (KB) To 2216.00 ft (KB) (TVD)
Total Depth: 2216.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Good

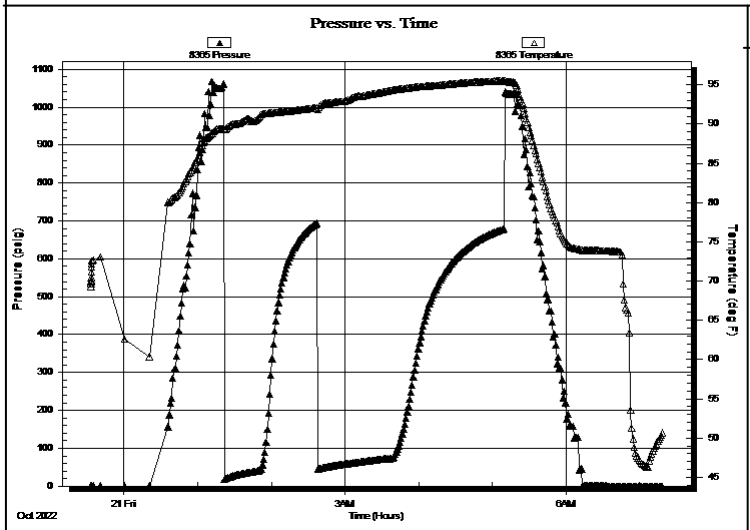
Reference Elevations: 1224.00 ft (KB)
1215.00 ft (CF)
KB to GR/CF: 9.00 ft

Serial #: 8365 **Outside**

Press@RunDepth: psig @ 2204.00 ft (KB)
Start Date: 2022.10.20 End Date: 2022.10.21
Start Time: 23:33:01 End Time: 07:19:02

Capacity: psig
Last Calib.: 2022.10.21
Time On Btm:
Time Off Btm:

TEST COMMENT: IF: Fair Blow , Built to 3.69"
ISI: No Blow Back
FF: Weak Blow , Built to 2.83"
FSI: No Blow Back



PRESSURE SUMMARY

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

Recovery

Length (ft)	Description	Volume (bbl)
0.00	Tool Sample SOSMW +\-1%O 30%M 69%	0.00
60.00	SOSMW +\-1%O 44%M 55%W	0.30
62.00	SOCM 2%O 98%M	0.30

Gas Rates

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

DRILL STEM TEST REPORT

FLUID SUMMARY

Raney Oil Company LLC

4665 Bauer Brook CT
Lawrence, KS 66049

ATTN: Roger Martin

5-34S-6E Cowley

House 5-A

Job Ticket: 69560 **DST#: 1**

Test Start: 2022.10.20 @ 23:33:00

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:	7800 ppm
Viscosity:	39.00 sec/qt	Cushion Volume:	bbl		
Water Loss:	9.59 in³	Gas Cushion Type:			
Resistivity:	ohm.m	Gas Cushion Pressure:	psig		
Salinity:	2700.00 ppm				
Filter Cake:	0.02 inches				

Recovery Information

Recovery Table

Length ft	Description	Volume bbl
0.00	Tool Sample SOSMW +\-1%O 30%M 69%W	0.000
60.00	SOSMW +\-1%O 44%M 55%W	0.295
62.00	SOCM 2%O 98%M	0.305

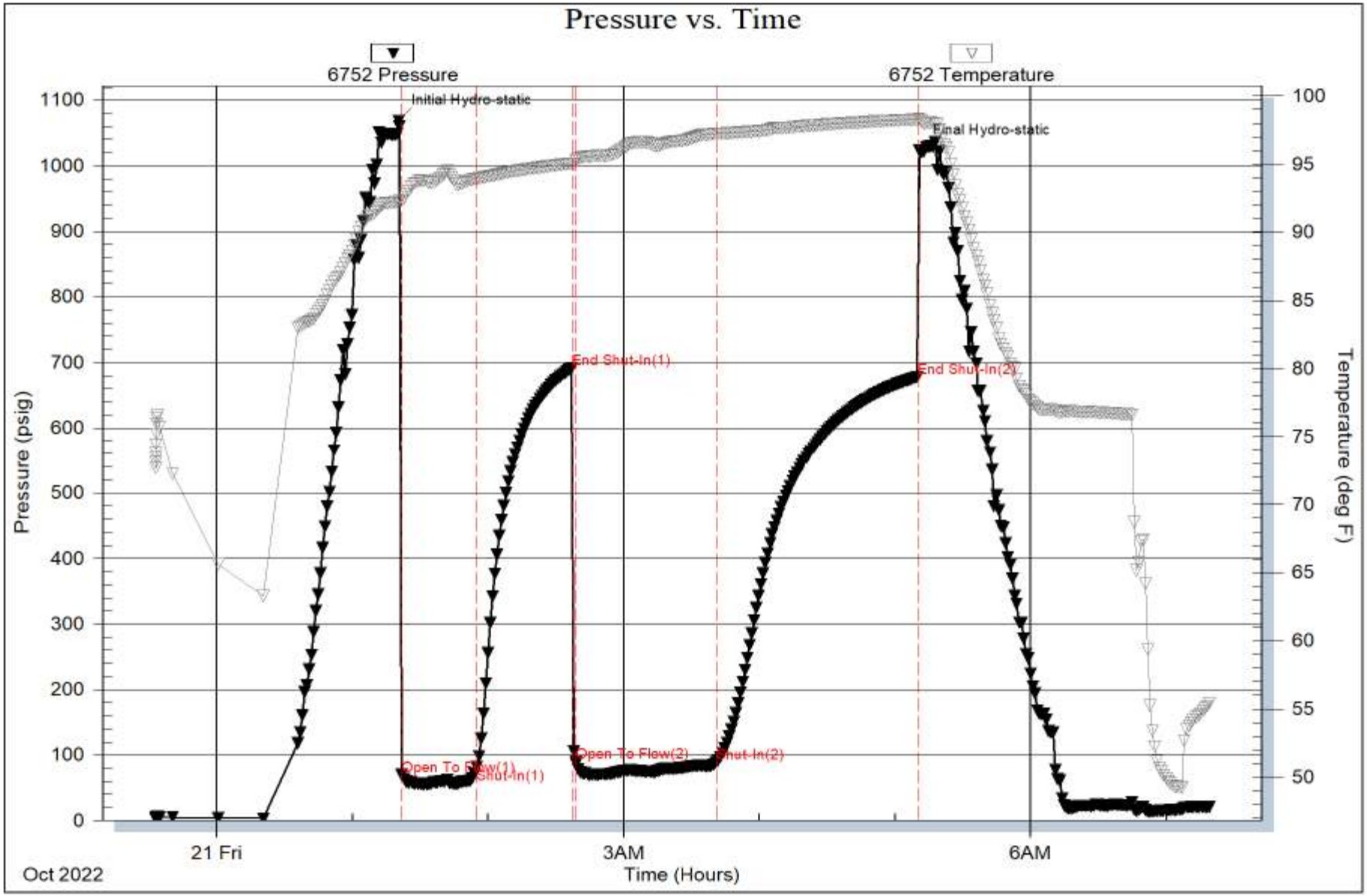
Total Length: 122.00 ft Total Volume: 0.600 bbl

Num Fluid Samples: 0 Num Gas Bombs: 0 Serial #:

Laboratory Name: Laboratory Location:

Recovery Comments: RW was .95 @ 54 degrees

Serial #: 6752 **Inside** Raney Oil Company LLC House 5-A DST Test Number: 1



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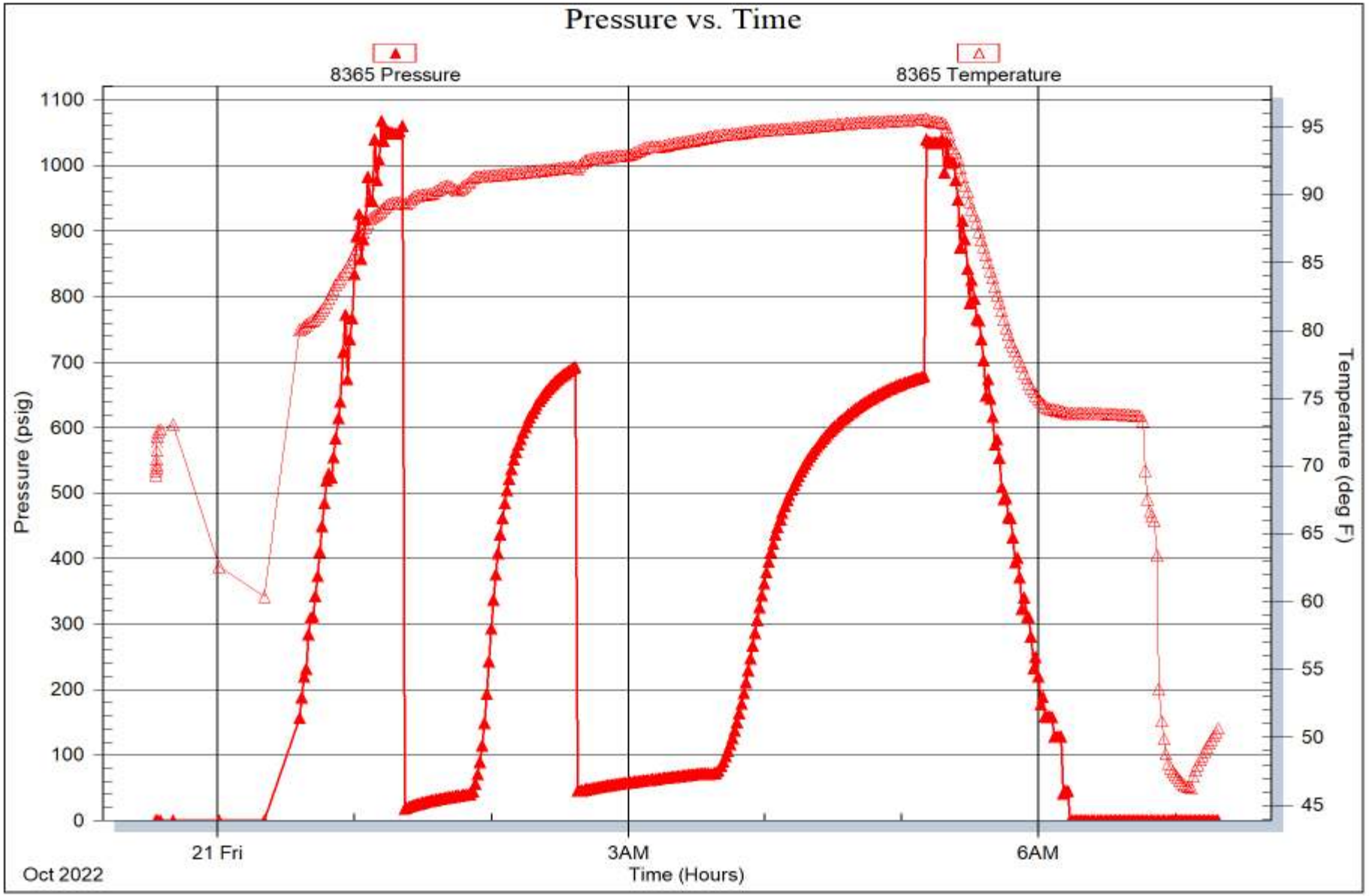
Serial #: 8365 **Outside** Raney Oil Company LLC House 5-A DST Test Number: 1



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