KOLAR Document ID: 1348174

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 # 9408
Name: Trans Pacific Oil Corporation
Address 1: 100 S MAIN STE 200
Address 2:
City: WICHITA State: KS Zip: 67202 + 3735
Contact Person: Glenna Lowe
Phone: (316) 262-3596
CONTRACTOR: License # 5123
Name: Pickrell Drilling Company, Inc.
Wellsite Geologist: Beth Isern
Purchaser: CHS

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 #:

02/01/2017	02/09/2017	02/21/2017
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No.: 15-135-25935-00-00
Spot Description:
__ - SE - NW - NE Sec. 16 Twp. 16 S. R. 24 ☐ East ☑ West
4072 Feet from ☐ North / ☑ South Line of Section
1632 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: Ness
Lease Name: ROLF Well #: 1-16
Field Name: Unknown
Producing Formation: Cherokee Sand
Elevation: Ground: 2528 Kelly Bushing: 2535
Total Vertical Depth: 4650 Plug Back Total Depth: 4593
Amount of Surface Pipe Set and Cemented at: 249 Feet
Multiple Stage Cementing Collar Used? ☑ Yes ☐ No
If yes, show depth set: 1857 Feet
If Alternate II completion, cement circulated from: 0
feet depth to: 1857 w/ 140 sx cmt.

Drilling Fluid Management Plan
(Data must be collected from the Reserve Pit)

Chloride content: 7000 ppm Fluid volume: 480 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: 04/06/2017
☑ **Confidential Release Date:** 04/06/2019
☑ **Wireline Log Received** ☐ **Drill Stem Tests Received**
☑ **Geologist Report / Mud Logs Received**
☐ **UIC Distribution**
ALT ☐ I ☑ II ☐ III **Approved by:** Karen Ritter **Date:** 04/06/2017

Operator Name: Trans Pacific Oil Corporation Lease Name: ROLF Well #: 1-16

Sec. 16 Twp. 16 S. R. 24 ☐ East ☑ West County: Ness

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:

Dual Induction
Comp Porosity
Sonic

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

Name	Top	Datum
See Attached	See Attached	See Attached

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	249	Common	170	3% cc, 2% gel
Production	7.875	5.5	16	4640	EA-2	170	1/4# flo

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:
02/21/2017	☐ Flowing ☑ Pumping ☐ Gas Lift ☐ Other *(Explain)*

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	85	0	0		

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:
	2.375	4447	

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

Form	ACO1 - Well Completion
Operator	Trans Pacific Oil Corporation
Well Name	ROLF 1-16
Doc ID	1348174

Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
4	4484'-4489'		

Form	ACO1 - Well Completion
Operator	Trans Pacific Oil Corporation
Well Name	ROLF 1-16
Doc ID	1348174

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	249	Common	170	3% cc, 2% gel
Production	7.875	5.5	16	4640	EA-2	170	1/4# flo

DIAMOND TESTING, LLC

TESTER : TIM VENTERS
CELL # 620-388-6333

General Information

Company Name	TRANS PACIFIC OIL CORPORATION		
Contact	BETH ISERN	Job Number	T593
Well Name	ROLF #1-16	Representative	TIM VENTERS
Unique Well ID	DST #1, CHEROKEE, 4424-4496	Well Operator	TRANS PACIFIC OIL CORPORATION
Surface Location	SEC 16-16S-24W, NESS CO. KS.	Report Date	2017/02/08
Well License Number		Prepared By	TIM VENTERS
Field	WILDCAT		
Well Type	Vertical		

Test Information

Test Type	CONVENTIONAL		
Formation	DST #1, CHEROKEE, 4424-4496		
Well Fluid Type	01 Oil		
Test Purpose	Initial Test		
Start Test Date	2017/02/07	Start Test Time	19:24:00
Final Test Date	2017/02/08	Final Test Time	07:50:00
Gauge Name	5504		

Test Results

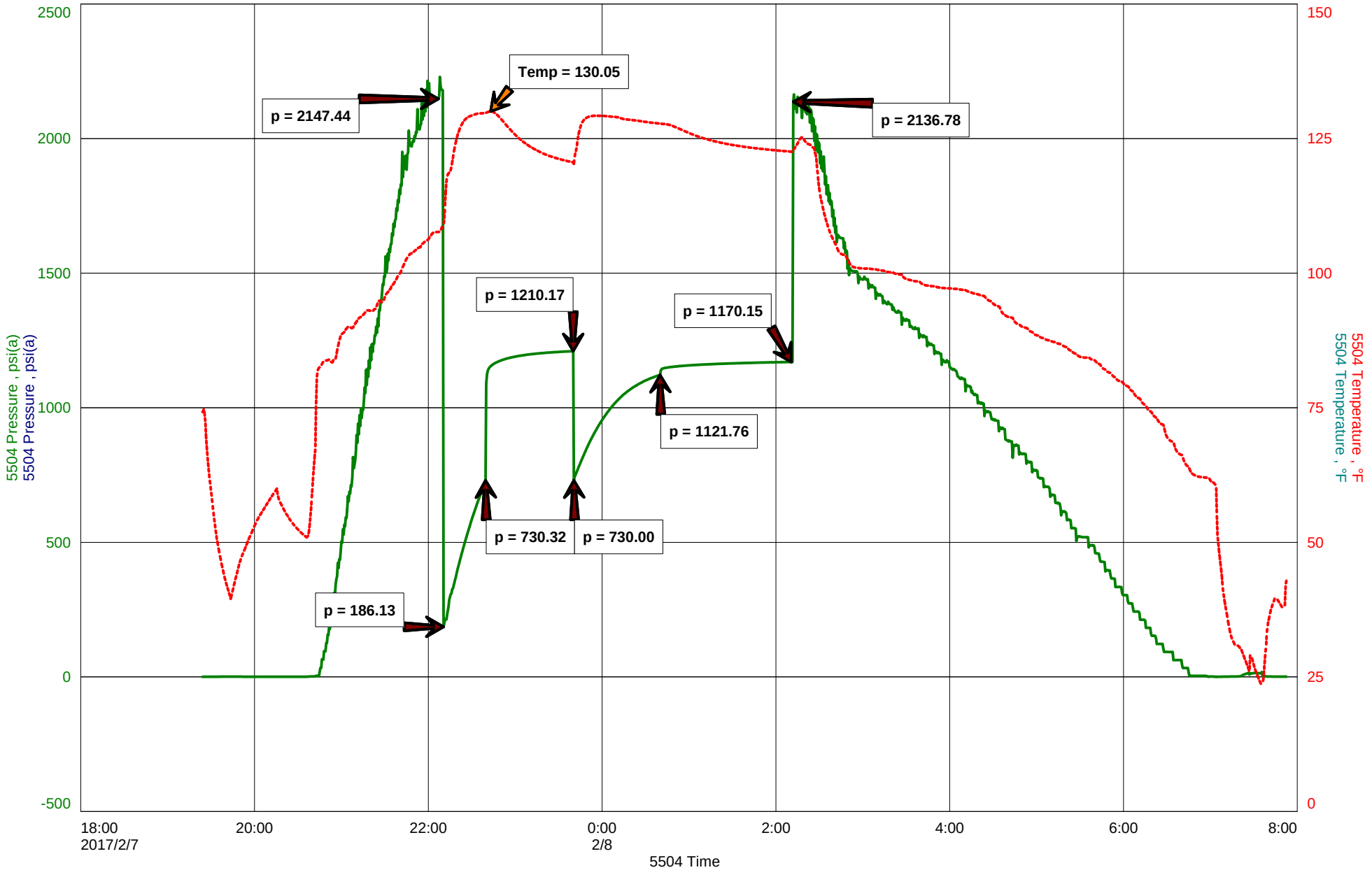
RECOVERED: 315' GAS IN PIPE
2645, GO, 4% GAS, 96% OIL, GRAVITY: 33
270' G,MCO, 9% GAS, 79% OIL, 12% MUD
60' G,SOCM, 6% GAS, 13% OIL, 81% MUD
2975' TOTAL FLUID

TOOL SAMPLE: 86% OIL, 14% MUD

TRANS PACIFIC OIL CORPORATION
DST #1, CHEROKEE, 4424-4496
Start Test Date: 2017/02/07
Final Test Date: 2017/02/08

ROLF #1-16
Formation: DST #1, CHEROKEE, 4424-4496
Pool: WILDCAT
Job Number: T593

ROLF #1-16



DIAMOND TESTING
P.O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313

DRILL-STEM TEST TICKET
FILE: ROLF1-16DST1

TIME ON: 19:24 2-7-17
TIME OFF: 07:50 2-8-17

Company TRANS PACIFIC OIL CORPORATION Lease & Well No. ROLF #1-16

Contractor PICKERELL DRILLING CO., INC. RIG #10 Charge to TRANS PACIFIC OIL CORPORATION

Elevation 2535 KB Formation CHEROKEE Effective Pay ____ Ft. Ticket No. T593

Date 2-7-17 Sec. 16 Twp. 16 S Range 24 W County NESS State KANSAS

Test Approved By BETH ISERN Diamond Representative TIM VENTERS

Formation Test No. 1 Interval Tested from 4424 ft. to 4496 ft. Total Depth 4496 ft.

Packer Depth 4419 ft. Size 6 3/4 in. Packer depth ____ ft. Size 6 3/4 in.

Packer Depth 4424 ft. Size 6 3/4 in. Packer depth ____ ft. Size 6 3/4 in.

Depth of Selective Zone Set ____

Top Recorder Depth (Inside) 4412 ft. Recorder Number 5504 Cap. 5,000 P.S.I.

Bottom Recorder Depth (Outside) 4493 ft. Recorder Number 11029 Cap. 5,025 P.S.I.

Below Straddle Recorder Depth ____ ft. Recorder Number ____ Cap. ____ P.S.I.

Mud Type CHEMICAL Viscosity 56 Drill Collar Length 0 ft. I.D. 2 1/4 in.

Weight 9.4 Water Loss 9.6 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in

Chlorides 2,800 P.P.M. Drill Pipe Length 4398 ft. I.D. 3 1/2 in

Jars: Make STERLING Serial Number ____ Test Tool Length 26 ft. Tool Size 3 1/2-IF in

Did Well Flow? NO Reversed Out NO Anchor Length 41 ft. Size 4 1/2-FH in

Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. 31' DP IN ANCHOR Surface Choke Size 1 in. Bottom Choke Size 5/8 in

Blow: 1st Open: STRONG 4 INCH BLOW, BUILDING, REACHING BOB 1 1/2 MIN. (1" BB)

2nd Open: WEAK 1/2 INCH BLOW, BUILDING, REACHING BOB 2 MIN. (NO BB)

Recovered 315 ft. of GAS IN PIPE

Recovered 2645 ft. of GO, 4% GAS, 96% OIL, GRAVITY: 33

Recovered 270 ft. of G,MCO, 9% GAS, 79% OIL, 12% MUD

Recovered 60 ft. of G,SOCUM 6% GAS, 13% OIL, 81% MUD

Recovered 2975 ft. of TOTAL FLUID

Recovered ____ ft. of ____

Remarks: ____

TOOL SAMPLE: 86% OIL, 14% MUD

Price Job	
Other Charges	
Insurance	
Total	

Time Set Packer(s) 10:10 PM A.M. P.M. Time Started Off Bottom 2:10 AM A.M. P.M. Maximum Temperature 130 deg.

Initial Hydrostatic Pressure ..... (A) 2147 P.S.I.

Initial Flow Period ..... Minutes 30 (B) 186 P.S.I. to (C) 730 P.S.I.

Initial Closed In Period ..... Minutes 60 (D) 1210 P.S.I.

Final Flow Period ..... Minutes 60 (E) 730 P.S.I. to (F) 1122 P.S.I.

Final Closed In Period ..... Minutes 90 (G) 1170 P.S.I.

Final Hydrostatic Pressure ..... (H) 2137 P.S.I.

Rolf A 1-16

Daily Report

API:	15-135-25935	**STR:**	16-16S-24W	**County:**	Ness
KB:	2535	**Location:**	1256 FNL 1670 FEL	**State:**	KS

Zone	Sample Top	Log Top	Structural Position	Comments
Anhydrite	1889 (646)	1887 (648)	+1	
Base Anhydrite	1922 (613)	1919 (616)	+1	
Heebner	3870 (-1335)	3869 (-1334)	+1	
Lansing	3909 (-1374)	3909 (-1374)	-1	
Base Kansas City	4204 (-1669)	4196 (-1661)	+8	
Pawnee	4322 (-1787)	4319 (-1784)	+5	
Fort Scott	4402 (-1867)	4397 (-1862)	+7	
Cherokee Shale	4428 (-1893)	4422 (-1887)	+6	
Cherokee Sand	4486 (-1951)	4483 (-1948)	-5	
Mississippian	4558 (-2023)	4564 (-2029)	-30	The Miss. Osage was encountered in the Rolf A 1-16, no Warsaw. The Miss. encountered in reference well was Warsaw.

ALLIED OFS, LLC

Federal Tax I.D. #81-2169190

58249

REMIT TO: Allied OFS, LLC
P.O. Box 205803
Dallas, TX 75320-5803

SERVICE POINT: Oakley

DATE 1-31-13	SEC 16	TWP 16S	RANGE 24W	CALLED OUT	ON LOCATION 6:00pm	JOB START	JOB FINISH 7:30p.m.
LEASE Rolf A	WELL # 1-16	LOCATION Ransom 3W 2N Wint0				COUNTY Ness	STATE KS
OLD OR (NEW) (Circle one)							

CONTRACTOR Pickrell #10
TYPE OF JOB Surface
HOLE SIZE 12¼ T.D. 252'
CASING SIZE 8⅝ DEPTH 252.85'
TUBING SIZE DEPTH
DRILL PIPE DEPTH
TOOL DEPTH
PRES. MAX MINIMUM
MEAS. LINE SHOE JOINT
CEMENT LEFT IN CSG. 15'
PERFS.
DISPLACEMENT 15.15 BBL

OWNER Same

CEMENT

AMOUNT ORDERED 170 sks com
3% cc 2% gel

COMMON	170 sks	@ 12.90	2193.00
POZMIX		@	
GEL	3 sks	@ 1.05	3.15.00
CHLORIDE	5 sks	@ 1.50	525.00
ASC		@	
		@	
		@	
		@	
		@	
		@	
		@	
		@	
		TOTAL	3,907.00
		DISCOUNT 43 %	1686.01

EQUIPMENT

PUMP TRUCK # 431 CEMENTER Andrew Felstead
HELPER Wayne McCurdy
BULK TRUCK # 323 DRIVER Jade M.
BULK TRUCK # DRIVER

REMARKS:

Circulated 3 BBL to pit

Thank you

SERVICE

HANDLING	184 cu/ft	@ 2.45	452.32
MILEAGE	2.35 Ton/mile 8 Ton		660.00
DEPTH OF JOB	252.85'		
PUMP TRUCK CHARGE			1572.35
EXTRA FOOTAGE		@	
HV MILEAGE	30 miles	@ 2.30	231.00
LV MILEAGE	30 miles	@ 4.40	132.00
		@	
		@	
		TOTAL	2,991.57
		DISCOUNT 43 %	1286.37

CHARGE TO: Trans Pacific Oil Corp
STREET
CITY STATE ZIP

PLUG & FLOAT EQUIPMENT

	@	
	@	
	@	
	@	
	@	
TOTAL		
DISCOUNT %		

To: Allied OFS, LLC.
You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

PRINTED NAME Mike Korn

SIGNATURE Mike Korn

SALES TAX (If Any)
TOTAL CHARGES 6,898.57
DISCOUNT 2966.38 (43%) IF PAID IN 30 DAYS
NET TOTAL 3,932.18 IF PAID IN 30 DAYS

THE PRINTING CO., INC. — GREAT BEND, KS.

JOB LOG — **SWIFT Services, Inc.**

DATE 2-9-17 | PAGE NO. 1

CUSTOMER: Trans Pacific Oil | WELL NO.: # 1-16 | LEASE: Rolf "A" | JOB TYPE: Cement 5½" Longstring | TICKET NO.: 29887

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS T	PUMPS C	PRESSURE (PSI) TUBING	PRESSURE (PSI) CASING	DESCRIPTION OF OPERATION AND MATERIALS
	0930							on location 5½" 15.5#
								RTD- 4650' LTD- 4648'
								TP- 4647' SJ- #1 43'
								P.C.- #64 1867'
								cent- #1 #2 #3 #4 #5 #6 #8 #10 #63 #65
								Basket #2 #64
1110	[redacted]							Start 5½" 15.5# casing in well
	1335							Drop Ball Circulate
	1350	6½	12		✓		300	Pump 500 gal Mud Flush
		6½	20		✓		300	Pump 20 bbl KCL Flush
			7-[redacted]					Plug RH- [redacted] (30/[redacted])
	1405	4½	[redacted] 41		✓		250	mix 170 [redacted] sks EA-2 w/ ¼# Flo @ 15.5 ppg
								Wash out Pump + Lines
								Release Latch Down Plug
	1415	6½	0		✓		100	Start Displacement
		6½	72		✓		300	Lift Pressure
		6½	108		✓		800	Max lift Pressure
	1440	6½	109.5		✓		1500	Land Latch Down Plug
								Release Pressure *Held*
								wash up truck
	1500							Job Complete
								Thank You
								Dave Jason Issac

JOB LOG

SWIFT Services, Inc.

DATE 2-16-17 | PAGE NO. 1

CUSTOMER	WELL NO.	LEASE	JOB TYPE	TICKET NO.
Trans Pacific Oil	1-16	Rolf	Cement Port Collar	29964

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL)(GAL)	PUMPS T	PUMPS C	PRESSURE (PSI) TUBING	PRESSURE (PSI) CASING	DESCRIPTION OF OPERATION AND MATERIALS
	1330							On Location
								Tubing - 2 3/8
								Casing - 5 1/2
								Port Collar @ 1857'
	1335				✓		1000	PSI Test - Held
	1340	3	3	✓		300		Open Port Collar - Inj Rate
	1345	4 1/2	86	✓		300		Mix Cement 155 sks SMD @ 11.2 PPG
	1410	4	6	✓		450		Displace Cement
	1415			✓		1000		Close Port Collar - PSI Test - Held
								Circulated 15 sks Cement to Pit
	1435	4	25		✓		400	Run 5 jts Circulate Clean
								Wash Truck
	1530							Job Complete

Thank You
Wayne, Dave K., Isaac

API #15-135-25935

TRANS PACIFIC OIL CORPORATION

TRANS PACIFIC OIL

GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

Geologist on Well: BETH ISERN
LEASE: ROLF A #1-16
FIELD:
LOCATION: 1256' FNL 1670' FEL
SEC 16 TWSP 16S RGE 24W
COUNTY: Ness STATE: Kansas
CONTRACTOR: Pickrell Drilling Rig #10
SPUD: 2/1/2017 COMP: 2/9/2017
RTD: 4650 LTD: 4648
MUD UP: 3600 TYPE MUD: Chemical
SAMPLES SAVED FROM 3700 TO RTD
DRILLING TIME KEPT FROM 3700 TO RTD
SAMPLES EXAMINED FROM 3700 TO RTD
GEOLOGICAL SUPERVISION FROM 4100
REFERENCE WELL: Rolf #1, Palomino Pet, 16-16S-24WW

ELEVATIONS

KB 2535
DF
GL 2528

Measurements Are All From Kelly Bushing

CASING

CONDUCTOR: NA
SURFACE: 8 5/8" @ 218'
PRODUCTION: 5-1/2" 4640'

ELECTRICAL SURVEYS: DIL, DUCP, ML, Sonic

PIONEER

Formation	Sample Tops	E-log Tops	Struct Pos.
Anhydrite	1889 (+646)	1887 (+648)	+1
Heebner	3870 (-1335)	3869 (-1334)	+1
Lansing	3909 (-1374)	3909 (-1374)	-1
BKC	4204(-1669)	4196 (-1661)	+8
Fort Scott	4402 (-1867)	4397 (-1862)	+7
Cher Shale	4428 (-1893)	4422 (-1887)	+6
Cher Sand	4486 (-1951)	4483 (-1948)	-5
Mississipp Osage	4569 (-2034)	4564 (-2029)	-30
Total Depth	4650 (-2115)	4648 (-2113)	

16 — Rolf A 1-16

REMARKS: It was decided to set production casing to further test the Rolf A #1-16 based on the the positive drill stem test and structural position from the Cherokee Sand. The Lansing J zone should be tested through production pipe before abandonment of this well.

Respectfully submitted,
Beth A. Isern

LEGEND

Anhydrite | Sandstone | Limestone | Shale | Carb Sh | Cherty LS | Chert | Dolomite

LITHOLOGY	DEPTH	DRILLING TIME IN MINUTES PER FOOT (Rate of Penetration Decreases →) 1.0 5 10 20	SAMPLE DESCRIPTION	REMARKS

Daily Drilling Report

2/1/17 Spud @ 1:47PM
2/2/17 Drlg @ 1225'
2/3/17 Drlg @ 2300'
2/4/17 Drlg @ 3060'
2/5/17 Drlg @ 3645'
2/6/17 Drlg @ 4091'
2/7/17 Drlg @ 4430'
2/8/17 Dst #1, drlg ahead
2/9/17 TD; Running casing

ANHYDRITE 1889 +646

B/ANH 1922 +613

HEEBNER 3870 (-1335)

LANSING 3909 (-1374)

BKC 4203(-1668)

PAWNEE 4322 (-1787)

FORT SCOTT 4402 (-1867)

CHER SHALE 4428 (-1893)

DST#1

CHER SAND 4486 (-1951)

OSAGE 4569 (-2034)

RTD 4650 (-2115)

Wh, chky ls w/ pr vis por, few pcs wh-tan sl sucr ls w/ occ fr vis por, NSFO, no stn

Wh chky ls AA w/ pcs gry, foss ls and pr vis por; sl chty; NSFO no stn

Tan-gy sl foss ls, chty w/ pcs rust sh, NSFO, no stn

Black shale

Crm, sl foss ls, pr vis por, NS; pcs lt gry sh w/ tan ds ls, NSFO

Tan, sl foss ls, tr calc rexln, few pcs w/ fr vis por, NSFO

Gy shale

Crm ls, few pcs ool and foss, gen pr vis por, NSFO

Tan, fxln ls, sl sucr w/ pr vis por, tr cht, gy shale, NSFO

Tan-dk tan, v ds ls w/ no vis por, blky, NSFO

Gy shale, pcs rust shale

Crm, foss ls, few pcs w/ fr ppt por and interxln por, NSFO, no stn

AA w/ pcs rd-rust sh and lt gy shale

Tan-lt gy ls, foss in part, dense, pr vis por, pcs shale, NSFO

Dk gy & rust sh; Crm chky ls

Crm chky ls AA; NS

Crm ool & ooc ls, fxln matrix, NS, no stn

Wh, ds ls, sl chky, pr vis por, NS

Gy & rst shale

AA, gy splintery sh;

Crm, lt tan, fxln ls, some sl chky; NS

Tr ool & ooc ls, NS, pr vis por; rush sh

Tan, ool & ooc ls, sl sucr matrix, NS,

Abdt gy and rush shale

Crm, fxln ls, sl ool, w/ rd &gy shale, NS

Wh, chky ls, gy & rst shale

Tan, ool & ooc ls with pr-fr vis ooc& interxln por, 10-12 pcs w/ dark stn and FSGO, fr odor

Tan, md xln ls w/ foss hash, pr vis por, NS no stn

Black & rush shale w/ white chky ls, NS

Tan-gy, microxln ls, v ds, NS

AA, tr cht

Tan ds ls, abdt dk gy shale w/ rust sh; NS

AA w/ pcs lt grn shale

Tan-gy dse ls, poor vis por, blocky,NS

AA sl cherty

Vis 58 wt 9.3

Crm chky ls, pcs cht w/ gy & rust shale; NS pr vis por

Crm chky to fxln ls &ds ls, few pcs rd-tan, mottled ls, lt grn shale, NS

Gy, foss ls, ds, v pr vis por, NS

Gy shale

Tan, microxln ls, no vis por, sl chrty, NS

AA

Crm, chky ls w/ lt grn shale; NS

Tan, fxln to sl chky & ds ls, v pr vis por, gy shale, NS

Crm, sl chky ls, dse, pr vis por, NS

LS AA, pcs gy shale

Ls AA

Ls AA

Crm, chky, ds ls AA, sl incr in gy shale

Ls & shale AA

Black, carb shale

Tan-gy, sl foss ls w/ fxln matrix, no vis por, NS, no stn, no odor

Crm, tan vfxln ls, frly ds, sl foss, NS, no stn , no odor

Blk shale

Crm-tan fxln ls, prtly foss w/ poor vis por; gry and lt grn, waxy shale,

Wh-crm, fxln & bds ls, tan, sl foss ls, no vis por, NS

Dk gy shale, wxy grn sh

Crm, fxln to sl chky ls, prtly foss, pr vis por, pcs gry and lt grn shale, tr rust sh; NS no odor

Various colors shale - gry, wxy lt grn, rust, purple; 5-6 pcs fgrnd snd, sil, pr vis por, SSFO, fnt odor, dull flr; pcs ta vxln ls, ds, no por, NS

Incr in gy, rust, grn shale; tr sand AA SSFO, fnt odor, tite, pr vis intergran por

Sh AA, w/ incr in tan, f-md grn, sil, glauc, pr vis por, few ang w/ fr intergran por; FSFO, gd odor & flour, Pcs wh frsh cht w NS; 60" circ smpl: Incr in tan, trip cht with GSFO, dark brn even stn, few pcs wh cht w/ edge stn, gd flour, gd odor

Flood brn, fngrnd well-srtd ss, prtly glauc w/ GSFO, gd fluor, gd odor and even stn; silicious cmt, pr vis por, few pcs gd intergran por.

Sand AA, brn, well srtd, gsfo,gd odor & fluor, brn even stn,few pcs turq and gry shale

Lt brn, stnd sand AA, gsfo & odor, few pcs white sand, ns, calc cmt, sl glauc,

Sand AA, w/ sl incr in gy & rust sh, some pcs tan, microxln ls w/ few pcs wh frsh cht.

AA w/ abdt rd and gy sh; pcs wh and ylw-white, fresh sharp cht w/ NSFO or stn.

Sl decr in snd w/ SFO, few pcs white, sl calc sand, barren; ABDT rd and gy and turq shale; pcs wht, lt gy fresh cht w/ NSFO, no stn

4580 smpl: Abdt gy, olive, rd shales,

Wht, lt gy frsh cht, NS, no stn; big decr in snd, some loose qtz grns

Wh, lt gy sharp cht, NSFO, no stn; ntr turq shale, few snd clstrs

Wht-ylw-lt gy fresh cht, NSFO

Chert AA, w/ pcs lt tan, brn vflx dol, pr vis por, NS, no stn

Wh frsh cht w/ white, vflxn and sl chky dol, v pr interxln por, NSFO

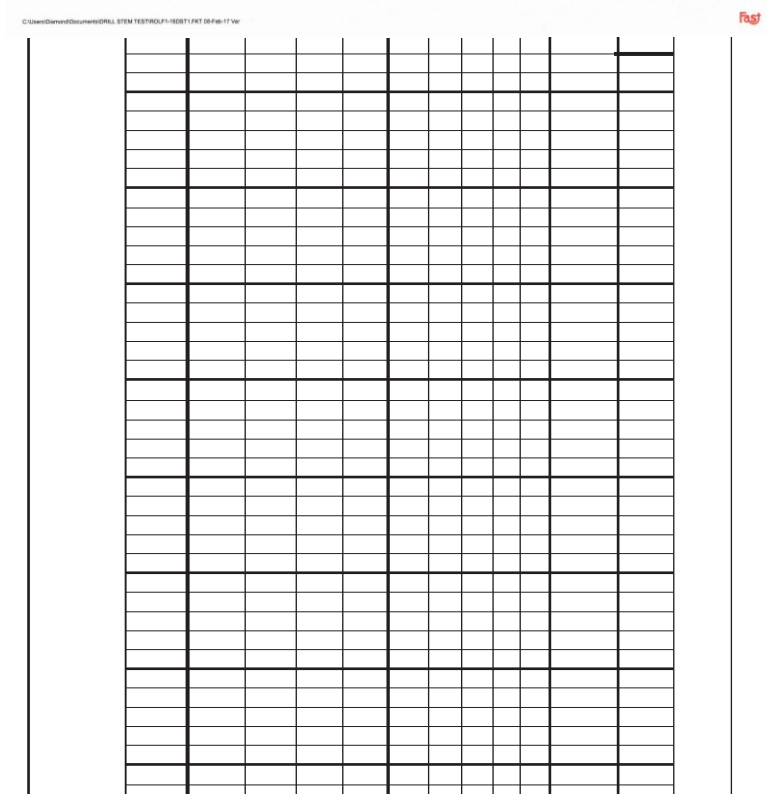
Cht and wht dol AA, few pcs w/ fr inter-xln por, NS, no stn, no odor; pcs lt gy, shp cht

Mo

Mostly wh frsh cht and wh, vfxln dol, pr vis por, NS, no stn

AA

Wh, lt tan, microxln ls, lots dol AA, pcs rush shale, NS, no odor



DST #1 4424-4496
30" 30" 60" 90"
1ST: BOB 1.5"(1"bb)
2ND: BOB 2" (no bb)
REC: 316'GIP
2645'GO
270'GMCO
60'GSOCM
TOTAL FLUID: 2975'
IFP: 186-730#
FFP: 730-1122#
ISIP: 1210#
FSIP: 1170#
HYD: 2147-2137#
TEMP: 130
GRAVITY: 33