

Subsequent Report of Abandonment

FILE NOTATIONS

Entered in NID File ✓

Entered On S R Sheet _____

Location Map Pinned ✓

Card Indexed ✓

IWR for State or Fee Land _____

Checked by Chief MB

Copy NID to Field Office _____

Approval Letter 6-22-67

Disapproval Letter _____

COMPLETION DATA:

Date Well Completed 7-20-67

Location Inspected _____

OW _____ WW _____ TA _____

Bond released _____

GW _____ OS _____ PA ✓

State of Fee Land _____

LOGS FILED

Driller's Log 8-8-67

Electric Logs (No.) 3

E _____ I _____ E-I _____ GR 1 _____ GRN _____ Miscro _____

Lat - 1 _____ Mi-L _____ Sonic _____ Others Acoustic survey - 1

**UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY**

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK
 DRILL DEEPEN PLUG BACK

b. TYPE OF WELL
 OIL WELL GAS WELL OTHER SINGLE ZONE MULTIPLE ZONE

2. NAME OF OPERATOR
Texas Pacific Oil Co., a Division of Joseph E. Seagrams & Son, Inc

3. ADDRESS OF OPERATOR
P. O. Box 747, Dallas, Texas 75221

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*
 At surface
764' FNL and 566' FEL of Section 14, T-40-S, R-25-E
 At proposed prod. zone
Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
Same

5. LEASE DESIGNATION AND SERIAL NO.
14-20-0603-446

6. INDIAN, ALLOTTEE OR TRIBE NAME
Navajo

7. UNIT AGREEMENT NAME
-

8. FARM OR LEASE NAME
Navajo

9. WELL NO.
1 - 14 *Eschay Field Extension Test*

10. FIELD AND POOL, OR WILDCAT
Cajon Ruins Area

11. SEC., T., R., M., OR BLM. AND SURVEY OR AREA
Sec. 14, T-40-S, R-25-E

12. COUNTY OR PARISH
San Juan

13. STATE
Utah

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)
Same as above

16. NO. OF ACRES IN LEASE
640

17. NO. OF ACRES ASSIGNED TO THIS WELL
Wildcat

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.
3/4 Mile NE of Shell 7575, D&A

19. PROPOSED DEPTH
5,900'

20. ROTARY OR CABLE TOOLS
Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
5,100' GR. (Est.)

22. APPROX. DATE WORK WILL START*
June 30, 1967

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17"	13-3/8	48#	200"	200 Sxs W/2% Cal. Ch.
*11" or 12"	8-5/8	24#	1400"	630 Sxs Common Pozmix + 4% gel.
7-7/8"	5-1/2	15.5#	5850"	200 Sxs Common Pozmix + 18% salt.

* Intermediate pipe to be set through the Navajo sand only if needed to contain water flow.

42-027-20050

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED *R. J. Womack* TITLE **Operations Superintendent** DATE **June 16, 1967**

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

FILE IN DUPLICATE

OIL & GAS CONSERVATION COMMISSION
OF THE STATE OF UTAH

DESIGNATION OF AGENT

The undersigned producer, operator, transporter, refiner, gasoline or initial purchaser who is conducting oil and/or gas operations in the State of Utah, does, pursuant to the Rules and Regulations, and Rules of Practice and Procedure of the Oil and Gas Conservation Commission of the State of Utah, hereby appoint, D. Howe Moffat, whose address is 1311 Walker Bank Bldg., Salt Lake City, Utah (his, her or its) designated agent to accept and to be served with notices from said Commission, or from other persons authorized under the Oil and Gas Conservation Act of the State of Utah.

The undersigned further agrees to immediately report in writing, all changes of address of the agent, and any termination of the agent's authority, and in the latter case, the designation of a new agent or agents shall be immediately made. This designation of agent, however, shall remain in full force and effect until and unless a new designation agent is filed in accordance with said statute and said regulations.

Effective Date of Designation November 18, 1963

Company TEXAS PACIFIC OIL COMPANY Address Box 747, Dallas, Texas 75221
a Division of Joseph E. Seagrams & Sons Inc.

By Title Operations Superintendent
(Signature)

NOTE: Agent must be a resident of Utah.

TEXAS PACIFIC OIL COMPANY

BOX 747

DALLAS, TEXAS 75221

June 19, 1967

RIVERSIDE 1-5933

2700 FIDELITY UNION TOWER BLDG.

State of Utah
Oil & Gas Conservation Commission
Salt Lake City, Utah

Re: Navajo 1-14 Sec. 14, T-40-S,
R-25-E
San Juan County, Utah

Gentlemen:

Attached herewith for your approval are two copies of the United States Department of the Interior, Geological Survey, Form 9-331C, Application for Permit to Drill with surveyor's "well location plat" on the referenced wildcat well.

If further information is needed concerning your approval, please advise.

Yours very truly,



L. B. Jeffers
Manager, Production Service

JCK/hb
Attachments

June 22, 1967

Texas Pacific Oil Company
Box 747
Dallas, Texas

Re: Well No. Navajo #1-14,
Sec. 14, T. 40 S., R. 25 E.,
San Juan County, Utah.

Gentlemen:

Insofar as this office is concerned, approval to drill the above mentioned well is hereby granted.

Should you determine that it will be necessary to plug and abandon this well, you are hereby requested to immediately notify the following:

PAUL W. BURCHELL, Chief Petroleum Engineer
HOME: 277-2890 - Salt Lake City, Utah
OFFICE: 328-5771 - 328-5772 - 328-5773

This approval terminates within 90 days if the well has not been spudded-in within said period.

Enclosed please find Form OGCC-8-X, which is to be completed whether or not water sands (aquifers) are encountered while drilling. Your cooperation with respect to completing this form will be greatly appreciated.

Texas Pacific Oil Company

June 22, 1967

-2-

The API number assigned to this well is 43-037-20250 (see Bulletin D12 published by the American Petroleum Institute).

Very truly yours,

OIL & GAS CONSERVATION COMMISSION

CLEON B. FEIGHT
EXECUTIVE DIRECTOR

CBF:sc

cc: U. S. Geological Survey
P. T. McGrath, District Engineer
Box 959
Farmington, New Mexico

June 22, 1967

W. O. Arns, Chief Location Engineer
Utah State Department of Highways
State Office Building
Salt Lake City, Utah

Re:

Texas Pacific Oil Company,
Well No. Navajo #1-14,
Sec. 14, T. 40 S., R. 25 E.,
San Juan County, Utah
(764' FNL & 566' FEL, SE NE NE).

Dear Mr. Arns:

Approval to drill the above mentioned well has been granted this date.

Would you please advise this Commission immediately if the well location is on or in close proximity to any highway which the Department of Highways intends to construct in the near future.

Thank you for your cooperation in this matter.

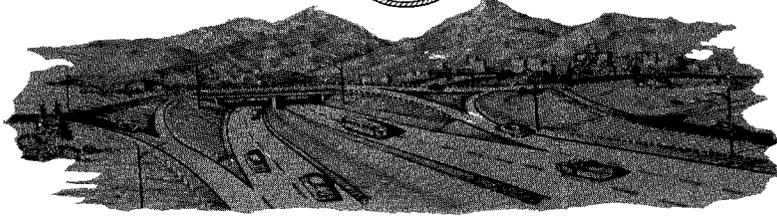
Very truly yours,

OIL & GAS CONSERVATION COMMISSION

CLEON B. FEIGHT
EXECUTIVE DIRECTOR

CBF:cnp

Shaw
DIRECTOR
HENRY C. HELLAND



STATE HIGHWAY ENGINEER
BLAINE J. KAY

Utah State Department of Highways

State Office Building
Salt Lake City, Utah 84114

June 26, 1967

Mr. Cleon B. Feight
Executive Director
Oil & Gas Conservative Commission
348 East South Temple, Suite 301
Salt Lake City, Utah 84111

Dear Mr. Feight:

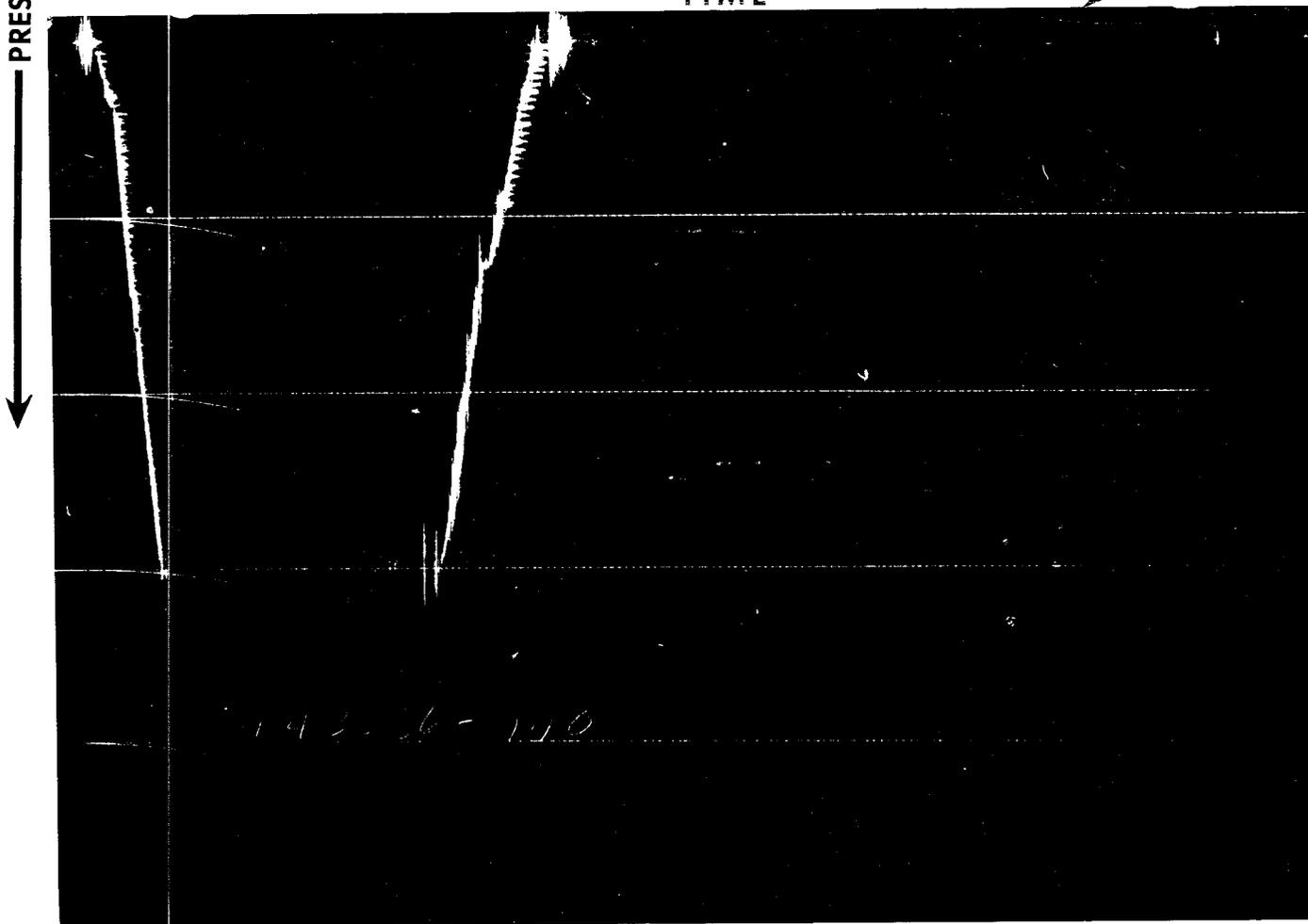
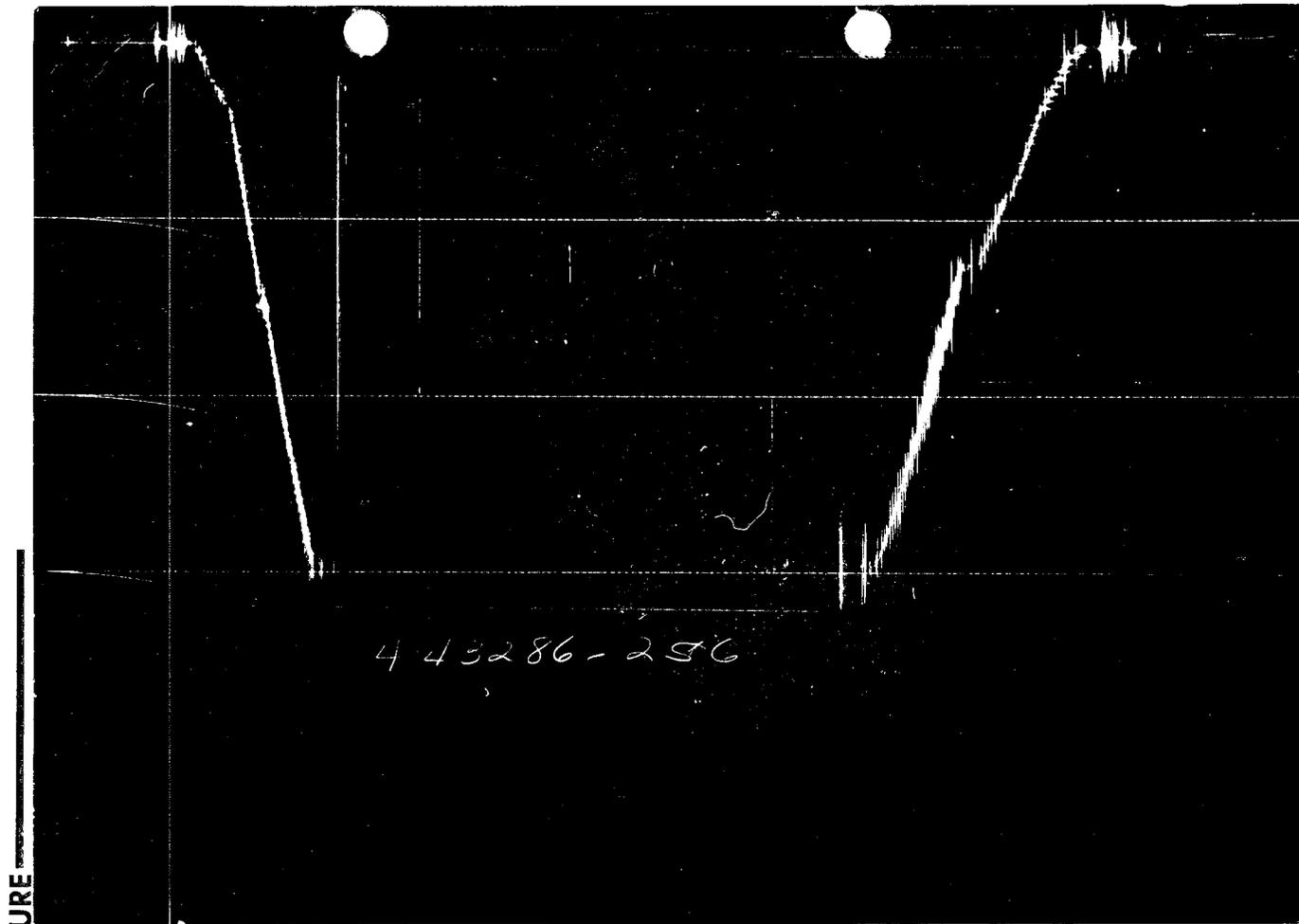
Subject: Texas Pacific Oil Company, Well No.
Navajo #1-14, Sec 14, T. 40 S.,
R. 25 E., San Juan Co., Utah
(764' FNL & 566' FEL, SE NE NE).

In reply to your letter of June 22, 1967, the above described well location is not in the immediate proximity of any State Highway and does not conflict with any planned improvements.

Very truly yours,

W O Arns

W. O. Arns
Chief Location Engineer



Each Horizontal Line Equal to 1000 p.s.i.

Flow Time	1st 5 Min.	2nd 90 Min.	Date	7-18-67	Ticket Number	443286 S
Closed In Press. Time	1st 45 Min.	2nd 120 Min.	Kind of Job	OPEN HOLE	Halliburton District	FARMINGTON
Pressure Readings	Field	Office Corrected	Tester	MR. WHITESIDES	Witness	MR. HIGGINS
Depth Top Gauge	5776 Ft.	Blanked Off no	Drilling Contractor	MESA DRILLING COMPANY	SS	
BT. P.R.D. No.	256	12 Hour Clock	Elevation	-	Top Packer	5789'
Initial Hydro Mud Pressure	2897	2987	Total Depth	5815'	Bottom Packer	5794'
Initial Closed in Pres.	1882	1958	Interval Tested	5815' - 5794'	Formation Tested	ISMAY
Initial Flow Pres.	145	1 329	Casing or Hole Size	7 7/8"	Casing Perfs. { Top	
Final Flow Pres.	163	1 252	Surface Choke	1"	Bottom Choke	3/4"
Final Closed in Pres.	1737	1826	Size & Kind Drill Pipe	4 1/2" FH	Drill Collars (90) I.D. - LENGTH	2 1/2" X 750'
Final Hydro Mud Pressure	-	2975	Mud Weight	10.3	Mud Viscosity	35
Depth Cen. Gauge	Ft.	Blanked Off	Temperature	135	*F Est. Anchor Size ID	2 3/8" X 20'
BT. P.R.D. No.		Hour Clock	Depths Mea. From	ROTARY TABLE	*F. Actual & Length OD	6" X 20'
Initial Hydro Mud Pres.			Cushion		Depth Back Pres. Valve	5771' Ft.
Initial Closed in Pres.			Recovered	2140 Feet of	Depth Back Pres. Valve	
Initial Flow Pres.	1		Recovered	240 Feet of	Mea. From Tester Valve	
Final Flow Pres.	1		Recovered	Feet of		
Final Closed in Pres.	2		Recovered	Feet of		
Final Hydro Mud Pres.			Oil A.P.I. Gravity		Water Spec. Gravity	
Depth Bot. Gauge	5811 Ft.	Blanked Off yes	Gas Gravity		Surface Pressure	psi
BT. P.R.D. No.	140	24 Hour Clock	Tool Opened	2:40 pm	A.M. Tool Closed	7:00 pm A.M. P.M.
Initial Hydro Mud Pres.	3024	3010	Remarks	Tool opened for 5 minute first flow with a		
Initial Closed in Pres.	2015	1973		good blow. Closed for 45 minute initial closed in		
Initial Flow Pres.	290	1 298		pressure. Reopened for 90 minute second flow. Closed		
Final Flow Pres.	407	1 272		for 120 minute final closed in pressure.		
Final Closed in Pres.	1240	2 1169				
Final Hydro Mud Pres.	1872	1845				
Final Hydro Mud Pres.	3024	2997				

Legal Location Sec - Twp - Rng. 14-40S-25E
 Lease Name NAVAJO
 Well No. 1-14
 Test No. 2
 Field Area WINDCAT
 County SAN JUAN
 State UTAH
 Lease Owner/Company Name TEXAS PACIFIC OIL COMPANY
 Owner's District DENVER, COLORADO

FORMATION TEST DATA

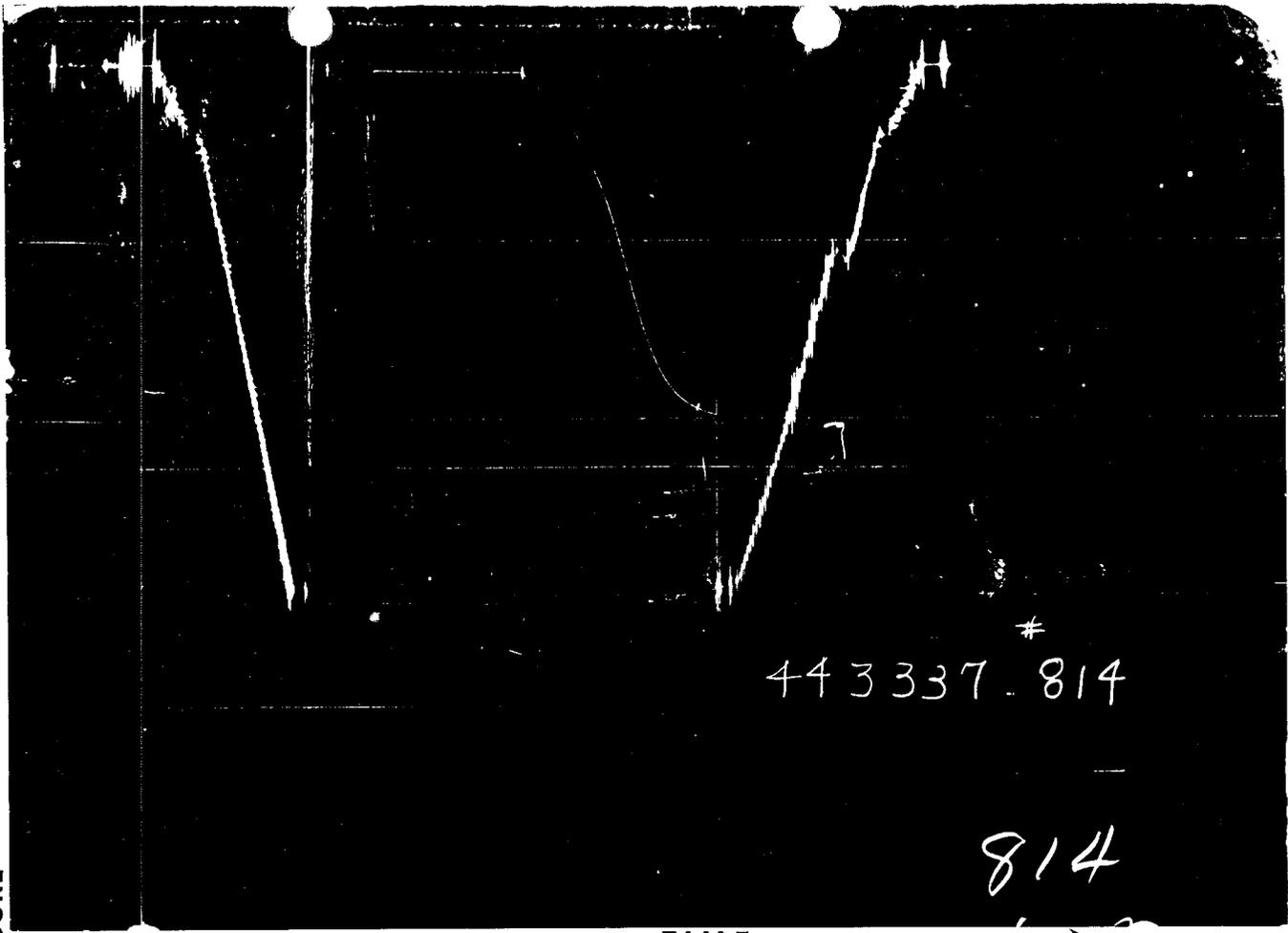
5

Gauge No. 256		Depth 5776'			Clock 12 hour		Ticket No. 443286			
First Flow Period		Initial Closed In Pressure			Second Flow Period		Final Closed In Pressure			
Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\theta}{\theta}$	PSIG Temp. Corr.	
P ₀	.000	329	.000		252	.000	315	.000		1153
P ₁	.029	252	.0333		1703	.100	546	.0801		1552
P ₂			.0666		1825	.200	734	.1602		1642
P ₃			.0999		1878	.300	869	.2403		1697
P ₄			.1332		1909	.400	980	.3204		1733
P ₅			.1665		1926	.500	1072	.4005		1759
P ₆			.1998		1938	.600	1153	.4806		1781
P ₇			.2331		1948			.5607		1796
P ₈			.2664		1954			.6408		1807
P ₉			.300		1958			.7209		1819
P ₁₀								.801		1826
Gauge No. 140		Depth 5811'			Clock 24 hour					
P ₀	.000	298	.000		272	.000	342	.000		1169
P ₁	.014	272	.0164		1733	.0497	570	.0402		1570
P ₂			.0328		1843	.0994	757	.0804		1662
P ₃			.0492		1895	.1491	891	.1206		1716
P ₄			.0656		1925	.1988	1001	.1608		1753
P ₅			.0820		1943	.2485	1093	.2010		1779
P ₆			.0984		1955	.298	1169	.2412		1799
P ₇			.1148		1962			.2814		1815
P ₈			.1312		1970			.3216		1826
P ₉			.148		1973			.3618		1838
P ₁₀								.402		1845
Reading Interval		5			15		12			Minutes
REMARKS:										

SPECIAL PRESSURE DATA

5

PRESSURE

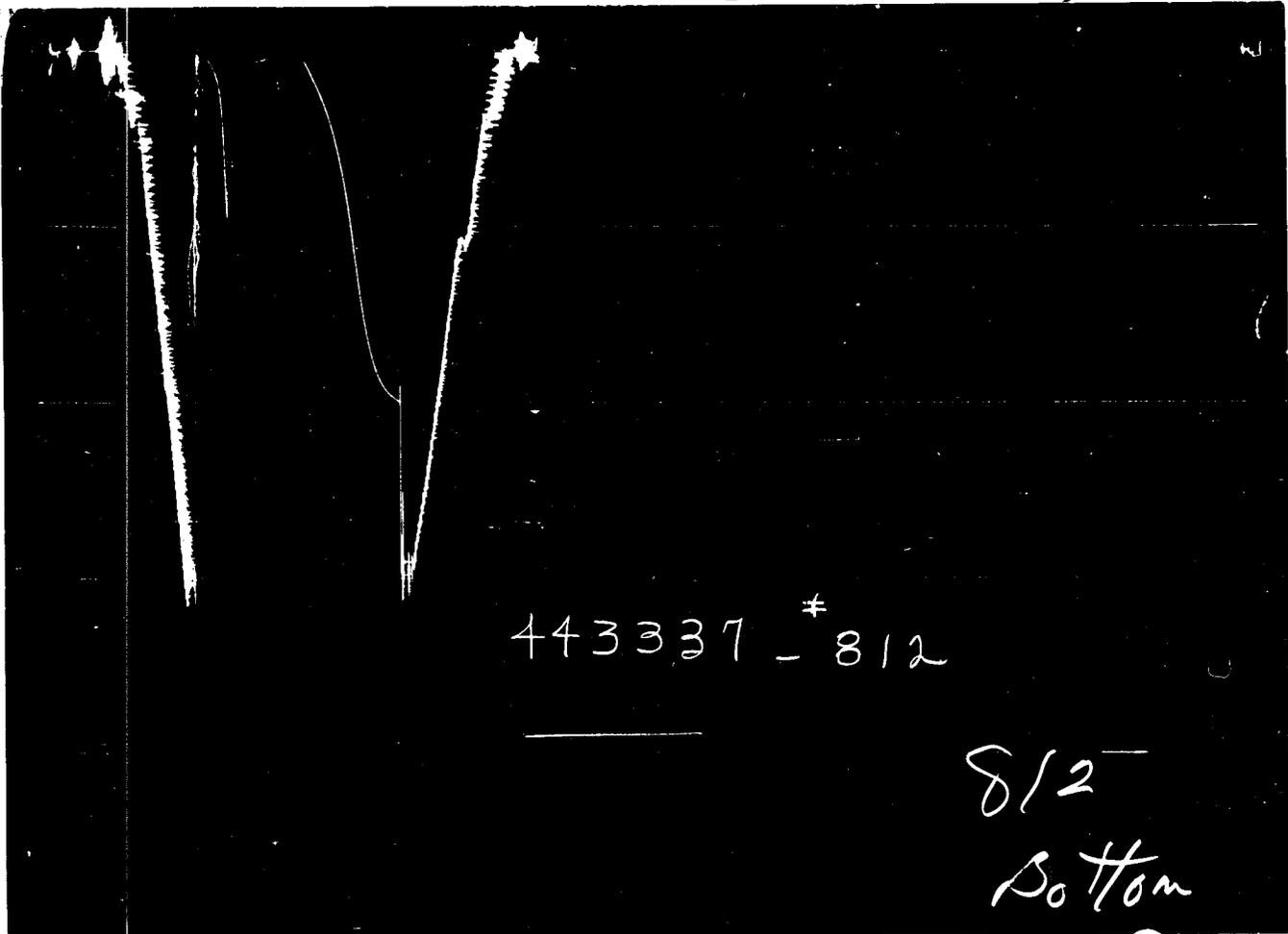


443337-814

814

TIME

PRESSURE



443337-812

812
Bottom

Each Horizontal Line Equal to 1000 p.s.i.

NAVAJO

1-14

1

TEXAS PACIFIC OIL COMPANY

DENVER

Lease Name

Well No.

Test No.

Lease Owner/Company Name

Owner's District

Legal Location
Sec. - Twp. - Rng.

14 - 40S - 25E

Field Area

ISMAY

County

SAN JUAN

State

UTAH

Flow Time	1st 10	Min.	2nd 80	Min.	Date	7-17-67	Ticket Number	443337 - S
Closed In Press. Time	1st 30	Min.	2nd 120	Min.	Kind of Job	OPEN HOLE	Halliburton District	FARMINGTON
Pressure Readings	Field		Office Corrected		Tester	SMITH	Witness	HIGGENS
Depth Top Gauge	5724' Ft.		NO Blanked Off		Drilling Contractor	mesa drillers		
BT. P.R.D. No.	814		12	Hour Clock	Elevation	5122'	Top Packer	5734'
Initial Hydro Mud Pressure	2944.9		2970		Total Depth	5761'	Bottom Packer	5739'
Initial Closed in Pres.	924.6		932		Interval Tested	5739' - 5761'	Formation Tested	UPPER ISMAY
Initial Flow Pres.	28	1	14		Casing or Hole Size	7 7/8"	Casing Perfs.	Top -
	28	2	32					Bot. -
Final Flow Pres.	28	1	24		Surface Choke	3/4"	Bottom Choke	3/4"
	28	2	45					
Final Closed in Pres.	1988.7		1971		Size & Kind Drill Pipe	4 1/2" FH DC 4 1/2" E-90	Drill Collars Above Tester	2 1/2" x 718'
Final Hydro Mud Pressure	2944.2		2951		Mud Weight	9.7	Mud Viscosity	47
					Temperature	130	Anchor Size	ID 2 1/2" X
Depth Cen. Gauge				Blanked Off			& Length	OD 5 3/4" X 22'
BT. P.R.D. No.				Hour Clock	Depths Mea. From	KELLY BUSHING	Depth of Tester Valve	5714' Ft.
Initial Hydro Mud Pres.					Cushion	NONE	Depth Back Pres. Valve	Ft.
Initial Closed in Pres.					Recovered	30'	Feet of	slightly oil & gas cut mud
Initial Flow Pres.		1			Recovered		Feet of	
		2						
Final Flow Pres.		1			Recovered		Feet of	
		2						
Final Closed in Pres.					Recovered		Feet of	
Final Hydro Mud Pres.					Oil A.P.I. Gravity		Water Spec. Gravity	
Depth Bot. Gauge	5759' Ft.		YES	Blanked Off	Gas Gravity		Surface Pressure	psi
BT. P.R.D. No.	812		24	Hour Clock	Tool Opened	2:10 AM	A.M. Tool Closed	6:10 AM A.M.
Initial Hydro Mud Pres.	3015.5		3011		Remarks	Tool opened for a 10 minute first flow.		
Initial Closed in Pres.	893.8		950		Rotated tool for a 30 minute initial closed in			
Initial Flow Pres.	57.3	1	43		pressure. Tool reopened with a weak blow, which			
	57.3	2	64					
Final Flow Pres.	57.3	1	47		continued throughout the test. Took a 120 minute			
	57.3	2	64					
Final Closed in Pres.	1990.0		1991		final closed in pressure. CIP MAY BE QUESTIONABLE			
Final Hydro Mud Pres.	2958.6		2984		DUE TO "S" TYPE CURVE.			

FORMATION TEST DATA

5

Gauge No. 814		Depth 5724'			Clock 12 hour		Ticket No. 443337			
First Flow Period		Initial Closed In Pressure			Second Flow Period		Final Closed In Pressure			
	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\theta}{\theta}$	PSIG Temp. Corr.	Time Defl. .000"	PSIG Temp. Corr.	Time Defl. .000"	Log $\frac{t+\theta}{\theta}$	PSIG Temp. Corr.
P ₀	.000	14	.000		24	.000	32	.000		45
P ₁	.080	24	.193		932	.1518	35	.0786		150
P ₂						.3036	38	.1572		274
P ₃						.4554	41	.2358		440
P ₄						.607	45	.3144		665
P ₅								.3930		989
P ₆								.4716		1391
P ₇								.5502		1695
P ₈								.6288		1859
P ₉								.7074		1934
P ₁₀								.786		1971
Gauge No. 812		Depth 5759'			Clock 24 hour					
P ₀	.000	43	.000		47	.000	64	.000		64
P ₁	.040	47	.095		950	.0773	59	.0398		173
P ₂						.1546	60	.0796		295
P ₃						.2319	60	.1194		458
P ₄						.309	64	.1592		687
P ₅								.1990		1010
P ₆								.2388		1418
P ₇								.2786		1717
P ₈								.3184		1881
P ₉								.3582		1957
P ₁₀								.398		1991
Reading Interval					20		12 Minutes			
REMARKS:										

SPECIAL PRESSURE DATA

1200
JMN

Dick Hogan

Lebas Pacific

API 43 037 20250

sec 14 T40S R25E

T.P. 5855 - logging

USGS:

Core = 3 MD/ft. } tight
DST = 30 mins }
D = 0.775 }
DST = 2100' salt water

45 sp - T.D. 155 sp = Upper F Zone Gasly Cond

30 sp - 4750 - 4645 - Top of Nemora

30 sp - 2950 - 2845 - De Chelly

30 sp - ? ? - Grassie

? = 2705 = salt water sand = depends on pipe

base of Pipe 13 3/4" e 2" left open

no flow = Norajo in gas hole/mud
well on plate / leaves for possible Indian
use.

JMN

July 19, 1967

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE*

(See other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1a. TYPE OF WELL:		OIL WELL <input type="checkbox"/>	GAS WELL <input type="checkbox"/>	DRY <input checked="" type="checkbox"/>	Other _____								
b. TYPE OF COMPLETION:		NEW WELL <input checked="" type="checkbox"/>	WORK OVER <input type="checkbox"/>	DEEP-EN <input type="checkbox"/>	PLUG BACK <input type="checkbox"/>								
				DIFF. RESVR. <input type="checkbox"/>	Other _____								
2. NAME OF OPERATOR a Division of Joseph E. Texas Pacific Oil Company, Seagraves & Son													
3. ADDRESS OF OPERATOR P. O. Box 747, Dallas, Texas 75221													
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)* At surface 764' FNL & 566' FNL of Sec. 14, T-40S, R-25E At top prod. interval reported below At total depth same													
14. PERMIT NO.			DATE ISSUED										

5. LEASE DESIGNATION AND SERIAL NO.		14-20-0803-44B											
6. IF INDIAN, ALLOTTEE OR TRIBE NAME		Navajo											
7. UNIT AGREEMENT NAME		***											
8. FARM OR LEASE NAME		Navajo											
9. WELL NO.		1-14											
10. FIELD AND POOL, OR WILDCAT		Cajon Ruins Area											
11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA		Sec. 14, T-40S, R-25E											
12. COUNTY OR PARISH		13. STATE											
San Juan		Utah											
15. DATE SPUEDDED	16. DATE T.D. REACHED	17. DATE COMPL. (Ready to prod.)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*		19. ELEV. CASINGHEAD								
6-29-67	7-19-67	7-20-67	5110' GL 5122' KB										
20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS								
5835'	5835'		→	0 - 5835'									
24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*					25. WAS DIRECTIONAL SURVEY MADE*								
None - Dry					yes								
26. TYPE ELECTRIC AND OTHER LOGS RUN					27. WAS WELL CORED								
Dual Induction-Laterolog, Sidewall-Neutron-Porosity Log & Compensated Formation-Density Log					yes								
28. CASING RECORD (Report all strings set in well)													
CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED								
13-3/8	48#	215'	17-1/4	200 sacks	none								
29. LINER RECORD			30. TUBING RECORD										
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)						
31. PERFORATION RECORD (Interval, size and number)			32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.										
Not perforated			<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>DEPTH INTERVAL (MD)</th> <th>AMOUNT AND KIND OF MATERIAL USED</th> </tr> </thead> <tbody> <tr> <td>none</td> <td></td> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> </tbody> </table>			DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED	none					
DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED												
none													
33.* PRODUCTION													
DATE FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)			WELL STATUS (Producing or shut-in)								
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO						
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORE.)							
34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)					TEST WITNESSED BY								
35. LIST OF ATTACHMENTS													
Chronological drilling report, logs listed in item 26 above, DST's 1 and 2, and core analysis results.													
36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.													
SIGNED <i>B. J. ...</i>		TITLE Operations Superintendent		DATE 6-4-67									

*(See Instructions and Spaces for Additional Data on Reverse Side)

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

Items 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 29: "Sacks Cement": Attached supplemental records for this well should show the details of any multiple stage-cementing and the location of the cementing tool.

Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES: SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF - CORED INTERVALS, AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES.

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
Core #1	5707	5761	See core analysis attached
Core #2	5761	5788	See core analysis attached
Core #3	5791	5815	See core analysis attached
Upper Tenny	5739	5761	DST #1 attached
Tenny	5754	5815	DST #2 attached

38. GEOLOGIC MARKERS

NAME	MEAS. DEPTH		TRUE VERT. DEPTH
	TOP	BOTTOM	
Wingate	1436'		
Chinle	1694'		
Shinarump	2647'		
De Chelly	2868'		
Hermons	4760'		
Tenny	5680'		

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
UNITED STATES

871-233

U.S. GOVERNMENT PRINTING OFFICE: 1963-O-683856

* (See instructions and spaces for Additional Data on Reverse Side)

FORM OGCC-8-X
FILE IN QUADRUPLICATE

STATE OF UTAH
OIL & GAS CONSERVATION COMMISSION
348 EAST SOUTH TEMPLE
SUITE 301
SALT LAKE CITY, UTAH

REPORT OF WATER ENCOUNTERED DURING DRILLING

Well Name & Number Navajo #1-14 API No. 43-037-20250
Operator Texas Pacific Oil Co. Address P. O. Box 747 Phone RI 1-5933
Contractor Mesa Drillers, Inc. Address Dallas, Texas Phone -----
Location NE 1/4 NE 1/4 Sec. 14 T. 40 N R. 25 E San Juan County, Utah.
S W

Water Sands:

<u>Depth</u>		<u>Volume</u>	<u>Quality</u>
From	To	Flow Rate or Head	Fresh or Salty
1.	<u>None encountered</u>		
2.	<u>-----</u>		
3.	<u>-----</u>		
4.	<u>-----</u>		
5.	<u>-----</u>		

(Continued on reverse side if necessary)

Formation Tops:

Wingate	-	1436'	De Chelley	-	2866'
Chinle	-	1694'	Hermosa	-	4760'
Shinarump	-	2647'	Ismay	-	5680'

Remarks:

- NOTE:
- (a) Upon diminishing supply of forms, please inform the Commission,
 - (b) Report on this form as provided for in Rule C-20, General Rules and Regulations and Rules of Practice and Procedure, (See back of form).
 - (c) If a water analysis has been made of the above reported zone, please forward a copy along with this form.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

14-20-0603-446

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

Navajo

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Navajo

9. WELL NO.

1-14

10. FIELD AND POOL OR WILDCAT

Navajo Basin Area

11. SEC., T., R., M., OR BLE AND SURVEY OR AREA

Sec. 14, T-40S, R-25E

12. COUNTY OR PARISH

San Juan

13. STATE

Utah

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1.

OIL WELL GAS WELL OTHER

Dry Hole

2. NAME OF OPERATOR

a Division of Joseph E. Texas Pacific Oil Company, Sangrams & Son, Inc.

3. ADDRESS OF OPERATOR

P. O. Box 747, Dallas, Texas 75221

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)
At surface

764' FNL & 566' FNL of Section 14, T-40S, R-25E

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

5110' GL

5122' KB

16.

Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

It is proposed to plug and abandon the above designated well in the following manner:

- Set 45 sx. plug from bottom of the hole to 5700 ft. approx.
- Set 30 sx. plug from 4750' to 4645 (top of Penn.) Hercules
- Set 30 sx. plug from 2950' to 2845' (top of Perm.) De Challey
- Set 30 sx. plug from 2725' to 2620' (prob. salt water sand)
- Set 30 sx. plug at top of Wingate to be determined from log.
- Leave Navajo fresh water sand covered with mud but available to complete as water well if desired.
- Weld surface marker to top of 13-3/8" surface casing.

Verbal approval to plug and abandon the Navajo 1-14 well per USGS instructions was given Mr. R. A. Higgins by Mr. Paul W. Burchell of the Utah State Oil & Gas Commission 7-19-67.

18. I hereby certify that the foregoing is true and correct

SIGNED [Signature]

TITLE Operations Superintendent

DATE 8-4-67

(This space for Federal or State office use)

APPROVED BY _____
CONDITIONS OF APPROVAL, IF ANY:

TITLE _____ DATE _____

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN PLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.

14-20-0603-446

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

Navajo

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Navajo

9. WELL NO.

1-14

10. FIELD AND POOL OR WILDCAT

Cajon Basin Area

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA

Sec. 14, T-40S, R-25E

12. COUNTY OR PARISH

San Juan

13. STATE

Utah

1. OIL WELL GAS WELL OTHER **Dry Hole**

2. NAME OF OPERATOR

Texas Pacific Oil Company, a Division of Joseph K. Seagram & Son, Inc.

3. ADDRESS OF OPERATOR

P. O. Box 747, Dallas, Texas 75221

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)
At surface

764' FWL & 566' FWL of Section 14, T-40S, R-25E

14. PERMIT NO.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)

5110' GL

5122' KB

16.

Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:

TEST WATER SHUT-OFF

FRACTURE TREAT

SHOOT OR ACIDIZE

REPAIR WELL

(Other)

PULL OR ALTER CASING

MULTIPLE COMPLETE

ABANDON*

CHANGE PLANS

SUBSEQUENT REPORT OF:

WATER SHUT-OFF

FRACTURE TREATMENT

SHOOTING OR ACIDIZING

(Other)

REPAIRING WELL

ALTERING CASING

ABANDONMENT*

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

T.D. 5855'

Ismay top 5680' Set 60 ex. plug 5855' to 5645'

Upper Hermosa 4760' (top Perm.) Set 30 ex. plug 4770' to 4665'

De Chelley 2866' (top Perm.) Set 30 ex. plug 2930' to 2825'

Shinarump 2647' Set 30 ex. plug 2745' to 2640'

Wingate 1436' (top Tri.) Set 30 ex. plug 1530' to 1425'

Welded marker to top of 13-3/8" surface casing.

Fenced reserve pit. To fill pits and level location as soon as water dries up.

18. I hereby certify that the foregoing is true and correct

SIGNED

[Signature]

TITLE

Operations Superintendent

DATE

8-4-67

(This space for Federal or State office use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

Drilling Report

6-29-67 T.D. 148' Drilling Surface Hole. Finished rigging up. Drilled rat hole and mouse hole. Spudded 3:00 P.M. Drilled surface hole from surface to 148' depth with SBit No. 1, HTC OSC#3 Re-tip 12 $\frac{1}{4}$ ".

6-30-67 T.D. 230' W.O.C. Surface Csg. Drilled 148' to 153' with SBit No. 1. Drilled 153' to 230' with SBit No. 2, Smith Re-tip 12 $\frac{1}{4}$ ". Deviation @ 222' depth 3/4 deg. Opened 12 $\frac{1}{4}$ " hole with SBit No. 3, C.P. 17 $\frac{1}{2}$ " Hole Opener from surface to 215' depth. Mud wt. 9#, vis. 38. Ran 7 jts. 13-3/8" 48# H-40 R-2 ST&C Casing with Howco type M casing shoe and one centralizer. (220.71 ft.)^{Incl. Conn. Joint} Landed @ 211.75 ft. depth. Cemented with 200 sks class A cement with 2% calcium chloride. Returns started with plug @ 110' depth. Good cement returns. Shut down with plug @ 185' depth. Standing W.O.C.

Drilling Report

- 7-1-67 T.D. 1704' Drilling. W.O.C. Pulled landing joint (25.75'). Top of surface casing 16 ft. below RT. Nippled up, tested BOP w/500 psi. Started drilling cement at 2:00 A.M. Top of cement at 180' depth. Drilled cement and shoe. Drilled ahead with 7-7/8" bit. Bit No. 1, HTC OSC3-J out at 1309', 1079 ft. in 14-3/4 hrs. Bit No. 2, Sec. S3T-J on at 1309'. Deviation 1/4 deg. @ 480', 3/4 deg. @ 756', 1-1/2 deg. @ 1309'. Drilling fluid water.
- 7-2-67 T.D. 2357' Drilling. Drilled 1704' to 2357' w/7-7/8" bit. Bit No. 2 out at 1930' depth. Bit No. 3, HTC OSC3-J on at 1930'. Deviation 2 1/2 deg. @ 1930'. Mudded up @ 2000' depth. Mud wt. 9.2#, vis. 35.
- 7-3-67 T.D. 2872' Drilling. Drilled 2357' to 2872' w/7-7/8" bit. Bit No. 3 out at 2388', 458' in 14-3/4 hrs. Bit No. 4, HTC OSC1G-J out @ 2828', 440' in 13-3/4 hrs. Bit No. 5, Sec. S4T-J on @ 2828'. Deviation 2 deg. @ 2350' and 1-3/4 deg. @ 2828'. Mud wt. 9.3 to 9.9#, vis. 35 to 40, W.L. 10, F.C. 2/32nds., Ph 11.
- 7-4-67 T.D. 3161' Drilling. Drilled 2872' to 3161' w/7-7/8" bit. Bit No. 5 out @ 2931', 103' in 10 hrs. Bit No. 6, HTC OSC1G-J out @ 3139', 208' in 11-3/4 hrs. Bit No. 7, HTC OSC1G-J on @ 3139' depth. Deviation 1-3/4 deg. @ 2931'. Mud wt. 10# to 9.8#, vis 45 to 36, W.L. 10.2 cc, F.C. 2/32 Ph 11.
- 7-5-67 T.D. 3492' Drilling. Drilled 3161' to 3492' w/7-7/8" bit. Bit No. 7 out @ 3371', 232' in 14 1/2 hrs. Bit No. 8, Sec. S4T-J on @ 3371'. Deviation 2 1/4 deg. @ 3371'. Mud wt. 9.8# to 9.9#, Vis. 35 to 38, W.L. 16, F.C. 2/32nds, Ph 9.5.
- 7-6-67 T.D. 3797' Drilling. Drilled 3492' to 3797' w/7-7/8" bit. Bit No. 8 out @ 3565', 194' in 13 hrs. Bit No. 9, Sec. S4T-J out @ 3768', 203' in 12 1/4 hrs. Bit No. 10, HTC OSC1G-J on @ 3768'. Deviation 2 1/4 deg. @ 3565'. Mud wt. 9.8#, vis. 37.
- 7-7-67 T.D. 4137' Drilling. Drilled 3797' to 4137' w/7-7/8" bit. Bit No. 10 out @ 3971', 203' in 13 hrs. Bit No. 11, Sec. S4T-J on @ 3971. Mud wt. 10.1#, Vis. 36, W.L. 12, F.C. 2/32, Ph 11.

Drilling Report

- 7-8-67 T.D. 4406' Drilling. Drilled 4137' to 4406' w/7-7/8" bit. Bit No. 11 out @ 4159', 188' in 12 hrs. Bit No. 12, Sec. S6-J out @ 4334', 175' in 11 hrs. Bit No. 13, HTC OSC1G-J on @ 4334'. Deviation 2 deg. @ 4159'. Mud wt. 9.8#, vis. 36, W.L. 18, F.C. 2/32nd, Ph 10.5.
- 7-9-67 T.D. 4708' Drilling. Drilled 4406' to 4708' w/7-7/8" bit. Bit No. 13 out @ 4547', 213' in 14 $\frac{1}{4}$ hrs. Bit No. 14, HTC OSC1G-J on @ 4547'. Deviation 1 $\frac{1}{2}$ deg. @ 4547'. Mud wt. 9.6# to 10#, Vis. 34 to 36, W.L. 12, F.C. 2/32nd, Ph 11.
- 7-10-67 T.D. 4901' Drilling. Drilled 4708' to 4901' w/7-7/8" bit. Bit No. 14 out @ 4717', 170' in 12 $\frac{1}{2}$ hrs. Bit No. 15, Sec. M4N-J out @ 4849', 132' in 12 $\frac{1}{2}$ hrs. Bit No. 16, HTC OWV-J on @ 4849'. Mud wt. 9.8, Vis. 34 to 35, W.L. 15, F.C. 2/32. Ph 10.5.
- 7-11-67 T.D. 5109' Drilling. Drilled 4901' to 5109' w/7-7/8" bit. Bit No. 16 out @ 4978', 129' in 13 $\frac{1}{4}$ hrs. Bit No. 17, Sec. M5-J on @ 4978'. Mud wt. 9.7#, vis. 37, W.L. 25, F.C. 2/32, Ph 11.
- 7-12-67 T.D. 5261' Drilling. Drilled 5109' to 5261' w/7-7/8" bit. Bit No. 17 out @ 5124', 146' in 13 $\frac{1}{2}$ hrs. Bit No. 18, HTC OWV-J out @ 5255', 131' in 13 hrs. Bit No. 19, Sec. M5-J on @ 5255'. Deviation 1 $\frac{1}{4}$ deg. @ 5124'. Mud wt. 9.7# to 9.8#, vis. 36 to 37.
- 7-13-67 T.D. 5443' Drilling. Drilled 5261' to 5443' w/7-7/8" bit. Bit No. 19 out @ 5378', 123' in 13 hrs. Bit No. 20, Sec. M5-J on @ 5378'. Deviation 1 deg. @ 5378'. Mud. wt. 9.8#, vis. 35, W.L. 27, F.C. 2/32nd, Ph 12.
- 7-14-67 T.D. 5607' Drilling. Drilled 5443' to 5607' w/7-7/8" bit. Strapped pipe out of hole and corrected hole from 5515 to 5518'. Bit No. 20 out @ 5518', 140' in 17 $\frac{1}{2}$ hrs. Bit No. 21, HTC OWV-J on @ 5518'. Mud wt. 9.7#, Vis. 36.

Drilling Report

- 7-15-67 T.D. 5716' Coring. Drilled 5607' to 5707' w/7-7/8" bit. Picked up core bbl and diamond bit @ 5707', cored core no. 1. Bit No. 21 out @ 5630', 115 ft. in 14-3/4 hrs. Bit No. 22, Sec. M-4-N-J out @ 5707', 77 ft. in 8 1/2 hrs. Christensen Diamond Products Core Bit No. 1, 7-13/16", on at 5707'. Deviation 1 deg. @ 5630'. Mud wt. 9.8, vis. 41, W.L. 12 cc, F.C. 2/32, Ph 11.5.
- 7-16-67 T.D. 5761' Going in for DST No. 1. Finished cutting Core No. 1. Total cored, 5707 to 5761, 54 ft., recovered 53 ft. Coring and connection time 9 hrs 10 min. Cutting time averaged 9-3/4 min. per ft. Top 23 ft. shale and anhydrite with few fractures bleeding water. Middle 11 ft. dense limestone. Next 11 1/2 ft. limestone with scattered oil stain with few scattered pin-points bleeding oil. Next 2 1/2 ft. dolomite with good odor but no visible bleeding. Bottom 5 ft. dense limestone. Picked up Halliburton Hydrospring tester, 22 ft. of anchor, 2 packers, jars and circulating sub. Set tool on bottom with bottom packer at 5739' to test interval 5739 to 5761'. Tool malfunctioned. Pulled tool and found multiple open & closing valve in "CIP" tool had been incorrectly assembled in shop and the tool had opened to the final "reverse circulating" position instead of the initial shut-in position. Pulled tool and picked up bit. Conditioned hole. Pulled out of hole and layed down one drill collar. Picked up DST tool and ran in hole.
- 7-17-67 T.D. 5791' Coring. Ran DST. No. 1. Set packer @ 5739'. Tested interval 5739' to 5761'. Initial flow period 10 min., ISI period 30 min., FF period 1 hr. 30 min., FSI period 2 hrs. Opened with weak blow. Increased to steady medium blow by end of 30 min. Continued steady with medium blow to end of test. No gas to surface. Pulled tool. Recovered 30 ft. of slightly oil and gas cut mud. Gas in drill pipe 700' above tool. IHP 3015 psi. IFP 57, ISIP 884, FFP 57, FSIP 1990, FHP 2939. Picked up core bbl and ran in hole. Cored core No. 2 from 5761 to 5788'. Bbl jammed so pulled core. Cut 27 ft. recovered 26 ft. Coring and connection time 5 hrs. 32 min. Average coring rate 11-2/3 min. per ft. Top 11 ft. tight, hard, dense limestone. 2 ft. dense limestone with few small fractures bleeding water. 4 ft. fossiliferous limestone with no porosity. 6 ft. dense, argillaceous limestone. 3 ft. dark gray, calcareous, dense shale. Ran in hole for Core No. 3. Cored 5788 to 5791'. Mud wt. 9.8#, vis 41, W.L. 9 cc, F.C. 2/32, Ph 12.

- 7-18-67 T.D. 5815' Testing. Cored on core No. 3 from 5791' to 5815'. Started coring @ 5788'. Cored 27 ft., recovered 28 ft. Top ft of core lost from core No. 2. Coring and connection time 5 hr. and 58 min. Average coring rate 12 min. & 53 sec. per ft. Top 7 ft. dark gray, calcareous, dense shale. Next 11 ft. tight limestone with vertical fractures bleeding oil and water in part. Bottom 10 ft. Limestone, good vugular porosity, odor and fluorescence. Bleeding oil and water. Ran DST No. 2. Packer set @ 5794'. Tested 5794' to 5815'. Tool opened 5 min. ISI period 45 min., FF period 1 hr. 30 min., FSI per. 2 hrs. Immediate medium strong blow. Gas to surface in 17 min. Gauged 14,720 SCF end of 55 min., 14,600 SCF and one hour. Steadily decreased to 10,800 SCF end 1½ hrs. Pulled tool. Found 2380 ft. of fluid in drill pipe. Top 240' (3.4 bbls.) Oil & Gas cut mud. Bottom 2140' (25.4 bbls) salt water. IHP 3024 psi. ISIP 2015, IFP 290, FFP 1246, FSIP 1872, FHP 3024.
- 7-19-67 T.D. 5855' Logging. Ran in hole with bit. Reamed core hole from 5707' to 5815' and drilled ahead from 5815' to 5855' w/7-7/8" bit. Pulled out of hole and ran in with dual induction instrument on Schlumberger line. Would not go below 5240' depth. Pulled out and ran in with bit. Chased something from 5240' to bottom. Conditioned hole. Pulled out and ran Schlumberger dual induction-laterolog and sidewall-neutron-porosity log. Started running compensated formation-density log.
- 7-20-67 T.D. 5855' Plugged and abandoned. Finished running formation-density log. Layed down drill collars and core bbl. Picked up 24 joints of DP and ran in open-ended to 5855'. Set 60 sack plug from 5855 to 5645', 30 sack plug from 4770 to 4665', 30 sack plug from 2930 to 2825', 30 sack plug from 2745 to 2640', 30 sack plug from 1530 to 1425 ft. Last plug in at 1:00 P.M. P & A

Log tops: Ismay 5680', Hermosa 4760', De Chelley 2866', Shinarump 2647', Chinle 1694', Wingate 1436'.

CORE ANALYSIS RESULTS

Company TEXAS PACIFIC OIL COMPANY Formation ISMAY File RP-3-2230
 Well NAVAJO 1-14 Core Type D/C Date Report 7/21/67
 Field ISMAY Drilling Fluid CHEM GEL Analysts GRAHAM
 County SAN JUAN State UTAH Elev 5122 KB Location SEC. 14-T4OS-R25E

Lithological Abbreviations

SAND SD SHALE-SH LIME-LM	DOLOMITE-DOL CHERT-CH GYPSUM-GYP	ANHYDRITE-ANHY CONGLOMERATE-CONG FOSSILIFEROUS-FOSS	SANDY SDY SHALY-SHY LMY-LMY	FINE FN MEDIUM-MED COARSE-CSE	CRYSTALLINE XLN GRAIN-GRN GRANULAR-GRNL	BROWN BRN GRAY-GY VUGGY-VGY	FRACTURED-FRAC LAMINATION-LAM STYLOLITIC-STY	SLIGHTLY-SL/ VERY-V/ WITH-W/
--------------------------------	--	---	-----------------------------------	-------------------------------------	---	-----------------------------------	--	------------------------------------

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCS K _A	POROSITY PER CENT	RESIDUAL SATURATION PER CENT PORE		SAMPLE DESCRIPTION AND REMARKS
				OIL	TOTAL WATER	
	CORE #1	MAX.	90°			
1	5730 -31.1	0.16	∅.10	7.1	2.7	74.4 SH:GRY, LMY, W/ANHY INCLU
2	5731.1-32	∅.10	∅.10	8.2	1.6	67.0 SH:GRY, LMY, W/ANHY INCLU
3	5732 -33.5	0.23	∅.10	9.9	1.5	74.8 SH:GRY, LMY, W/ANHY INCLU
4	5733.5-34.8	∅.10	∅.10	6.1	3.2	73.8 LS:GRY, DENS, ARGIL, VERT FRAC
5	5734.8-35.9	0.50	0.33	7.7	6.0	74.6 LS:GRY, DENS, W/ANHY INCLU, ARGIL
6	5735.9-37.3	0.72	0.22	4.7	1.9	66.5 LS:GRY, ARGIL, FOSS, W/ANHY INCLU
7	5737.3-38.5	0.60	0.12	1.1	1.8	70.0 LS:GRY, XLN, DENS
8	5738.5-39.5	∅.10	∅.10	1.2	1.7	55.8 LS:GRY, XLN, V/DENS, W/ANHY INCLU
9	5739.5-41.2	∅.10	∅.10	2.0	11.0	54.0 LS:BLK, V/DENS, FOSS, W/ANHY
10	5741.2-42.8	∅.10	∅.10	2.8	2.9	67.8 LS:LT GRY, ARGIL, SLI/DOL, FOSS
11	5742.8-44	0.58	0.37	5.7	8.8	56.0 LS:LT GRY, ARGIL, SLI/DOL, FOSS
12	5744 -45	0.29	0.21	17.1	14.0	62.3 LS:LT GRY, SLI/ARGIL, DOL, FOSS
13	5745 -46.3	0.48	0.40	15.6	18.1	42.2 LS:GRY, ARGIL, SLI/DOL, SUC
14	5746.3-48	0.93	0.45	4.0	9.0	54.7 DOL:GRY, LOC CALC
15	5748 -49.4	0.56	0.33	2.2	4.1	74.5 LS:GRY, DENS, V/DOL
16	5749.4-50.6	0.67	0.36	1.2	1.7	66.7 LS:GRY, XLN, DENS, SLI/DOL
17	5750.6-52	0.39	0.31	1.2	1.7	91.6 LS:GRY, XLN, DENS, SLI/DOL
18	5752 -53.2	3.14	1.16	7.7	11.4	26.2 DOL:BRN, ARGIL, SUC
19	5753.2-54.8	3.06	2.50	19.6	19.1	41.3 DOL:BRN, ARGIL, SUC
20	5754.8-56	1.69	0.68	6.1	3.1	66.5 LS:DK GRY, DENS, DOL, VERT FRAC
21	5756 -57.3	8.35	2.80	0.9	3.3	50.0 LS:DK GRY, V/DENS, VERT FRAC
22	5757.3-58.9	0.16	∅.10	0.9	3.3	70.0 LS:BLK, SHLY, V/DENS, FOSS
23	5758.9-60	∅.10	∅.10	1.3	3.1	70.8 LS:GRY, DENS
	CORE #2 CONVENTIONAL TYPE ANALYSIS					
24	5761-62	0.53		1.6	0.0	50.0 LS:GRY, DENS
25	5762-63	0.01		2.5	0.0	48.0 LS:GRY, DENS
26	5763-64	0.02		1.3	0.0	46.1 LS:GRY, DENSE
27	5764-65	0.02		1.4	0.0	42.9 LS:GRY-DK GRY, SHLY, DENS
28	5765-66	0.03		3.1	0.0	80.6 LS:GRY, SHLY
29	5766-67	0.01		1.9	0.0	63.2 LS:GRY, SHLY, DENSE
30	5767-68	0.01		2.2	13.6	59.1 LS:GRY, SLI/SHLY, DENS
31	5768-69	0.28(FRAC)	0.9	0.0	0.0	44.5 LS:GRY, SLI/SHLY, DENS
32	5769-70	0.01		1.5	0.0	53.3 LS:GRY, SLI/DOL, FOSS
33	5770-71	1.79(FRAC)	1.5	0.0	0.0	43.4 LS:GRY, BADLY FRAC
34	5771-72	12.6 (FRAC)	2.2	0.0	0.0	48.2 LS:GRY, XLN, BADLY FRAC
35	5772-73	0.01		2.2	13.6	59.1 LS:BRN, DENS, W/ANHY INCLU
36	5773-74	0.01		2.3	12.9	56.6 LS:GRY, SLI/DOL
37	5774-75	0.01		2.7	11.1	62.7 LS:GRY, FOSS
38	5775-76	∅.01		2.5	12.0	52.0 LS:GRY, DENS, FOSS

SERVICE #5-B & 5-A

These analyses, opinions or interpretations are based on observations and materials supplied by the client to whom, and for whose exclusive and confidential use, this report is made. The interpretations or opinions expressed represent the best judgment of Core Laboratories, Inc. (all errors and omissions excepted); but Core Laboratories, Inc. and its officers and employees, assume no responsibility and make no warranty or representations, as to the productivity, proper operations, or profitability of any oil, gas or other mineral well or sand in connection with which such report is used or relied upon.

CORE ANALYSIS RESULTS

Company TEXAS PACIFIC OIL COMPANY Formation ISMAY File RP-3-2230
 Well NAVAJO 1-14 Core Type D/C Date Report 7/21/67
 Field ISMAY Drilling Fluid CHEM GEL Analysts GRAHAM
 County SAN JUAN State UTAH Elev. 5122 KB Location SEC. 14-T4OS-R25E

Lithological Abbreviations

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCYS K	POROSITY PER CENT	RESIDUAL SATURATION PER CENT PORE		SAMPLE DESCRIPTION AND REMARKS		
				OIL	TOTAL WATER			
SAND - SD SHALE - SH LIME - LM	DOLOMITE - DOL CHERT - CH GYPSUM - GYP	ANHYDRITE - ANHY CONGLOMERATE - CONG FOSSILIFEROUS - FOSS	SANDY - SDY SHALY - SHY LMY - LMY	FINE - FN MEDIUM - MED COARSE - CSE	CRYSTALLINE - XLN GRAIN - GRN GRANULAR - GRNL	BROWN - BRN GRAY - GY VUGGY - VGY	FRACTURED - FRAC LAMINATION - LAM STYLOLITIC - STY	SLIGHTLY - SL/ VERY V/ WITH W/

SAMPLE NUMBER	DEPTH FEET	PERMEABILITY MILLIDARCYS K	POROSITY PER CENT	RESIDUAL SATURATION PER CENT PORE		SAMPLE DESCRIPTION AND REMARKS
				OIL	TOTAL WATER	
CORE #2 CONTINUED						
39	5776-77	0.01	1.9	15.8	47.3	LS:GRY, DENS
40	5777-78	0.01	0.8	0.0	50.0	LS:GRY, DENS
41	5778-79	0.01	0.8	0.0	25.0	LS:GRY, DENS, SLI DOL
42	5779-80	0.01	1.6	0.0	37.5	LS:GRY, DENS
43	5780-81	<0.01	1.4	0.0	42.9	LS:GRY, DENS, SLI DOL
44	5781-82	0.01	1.1	0.0	54.6	LS:GRY, DENS, SLI/SHLY
45	5782-83	0.01	1.6	18.7	25.0	LS:GRY, DENS
46	5783-84	0.01	0.9	33.3	22.5	LS:GRY, DENS
47	5784-85	0.01	1.2	25.0	33.3	LS:GRY, DENS, SLI/SHLY
48	5785-86	0.01	0.9	33.3	44.4	LS:GRY, DENS, SLI/SHLY
49	5786-87	0.63(FRAC)	1.3	0.0	69.3	LS:GRY, DENS, SLI/DOL
CORE #3 WHOLE CORE TYPE ANALYSIS						
		MAX.	90°			
50	5793 -94	0.07*	3.0	0.6	85.4	SH:BLK, LMY, DENS
51	5794- -95.5	178.0 *(FRAC)	5.8	18.6	57.9	LS:GRY, PIN PT POR, VERT FRAC
52	5795.5-96.8	0.65 0.33	12.6	6.8	41.3	DOL:GRY, V/VGY, FOSS
53	5796.8-98	0.56*	14.4	7.3	34.7	DOL:GRY, V/VGY, FOSS, SLI/LMY, VERT FRAC
54	5798 -99.5	0.02*	8.6	3.5	48.0	DOL:GRY, VGY, SLI/LMY, VERT FRAC
55	5799.5-5800.5	0.02*	5.1	5.3	56.5	DOL:GRY, SLI/VGY, V/DOL, VERT FRAC
56	5800.5-02.5	0.34 <0.10	2.3	0.0	84.0	LS:GRY, SLI/VGY, DOL, FOSS, VERT FRAC
57	5802.5-03.5	<0.10 <0.10	3.1	0.0	88.1	LS:GRY, SLI/SHLY, DENS
58	5803.5-04.8	1.84 0.38	2.7	3.7	59.6	LS:GRY, DOL, FOSS, VERT FRAC
59	5804.8-05.7	0.52 0.16	3.9	3.6	51.6	DOL:GRY, LMY, VGY, FOSS, HAIRLINE VERT FRAC
60	5805.7-06.9	7.53 2.58	9.2	5.0	37.7	DOL:GRY, LMY, VGY, FOSS, VERT FRAC
61	5806.9-07.7	2.42 1.98	7.1	7.9	36.6	DOL:GRY, LMY, VGY, FOSS
62	5807.7-09.3	3.19 2.49	8.9	6.1	33.2	LS:GRY, DOL, VGY, FOSS
63	5809.3-10.3	12.70 8.84	13.66	4.0	46.3	DOL:GRY, V/VGY, LMY, FOSS
64	5810.3-11.5	8.97 6.44	8.1	4.7	33.8	LS:GRY, SLI/VGY, DOL
65	5811.5-13	8.73 6.29	9.3	5.8	25.2	DOL:GRY, SLI/VGY, LMY
66	5813 -14	16.39 7.39	10.7	5.8	31.8	DOL:GRY, VGY, LMY, FOSS, VERT FRAC
67	5814 -15.1	1.86 0.38	10.7	5.1	32.3	LS:GRY, VGY, DOL, FOSS, VERT FRAC
68	5815.1-16	39.8 *	10.0	6.4	26.5	DOL:GRY, VGY, LMY, FOSS, VERT FRAC

*MATRIX PERMEABILITY, SAMPLE NOT SUITABLE FOR WHOLE CORE PERMEABILITY MEASUREMENT
SERVICE #5-A & 5-B