



RAILROAD COMMISSION OF TEXAS

Form W-2

1701 N. Congress
P.O. Box 12967
Austin, Texas 78701-2967

Status: Approved
Date: 07/07/2017
Tracking No.: 170916

OIL WELL POTENTIAL TEST, COMPLETION OR RECOMPLETION REPORT, AND LOG

OPERATOR INFORMATION

Operator Name: WYCO OIL & GAS LLC Operator No.: 945368
Operator Address: PO BOX 12367 ODESSA, TX 79768-2367

WELL INFORMATION

API No.: 42-495-32488 County: WINKLER
Well No.: 1 RRC District No.: 08
Lease Name: UNIV. 20-12 Field Name: PHANTOM (WOLFCAMP)
RRC Lease No.: 48648 Field No.: 71052900
Location: Section: 12, Block: 20, Survey: UL, Abstract:
Latitude: 31.74121 Longitude: -103.29251
This well is located 7.8 miles in a WEST direction from WINK, which is the nearest town in the county.

FILING INFORMATION

Purpose of filing: Initial Potential
Type of completion: Deepening
Well Type: Producing Completion or Recompletion Date: 02/27/2017
Type of Permit Date Permit No.
Permit to Drill, Plug Back, or Deepen 12/30/2016 821372
Rule 37 Exception
Fluid Injection Permit
O&G Waste Disposal Permit
Other:

COMPLETION INFORMATION

Spud date: 01/24/2017 Date of first production after rig released: 02/27/2017
Date plug back, deepening, recompletion, or drilling operation commenced: 01/24/2017 Date plug back, deepening, recompletion, or drilling operation ended: 02/26/2017
Number of producing wells on this lease in this field (reservoir) including this well: 1 Distance to nearest well in lease & reservoir (ft.): 0.0
Total number of acres in lease: 40.00 Elevation (ft.): 2817 GR
Total depth TVD (ft.): 13467 Total depth MD (ft.):
Plug back depth TVD (ft.): 13467 Plug back depth MD (ft.):
Was directional survey made other than inclination (Form W-12)? No Rotation time within surface casing (hours):
Is Cementing Affidavit (Form W-15) attached? Yes
Recompletion or reclass? No Multiple completion? No
Type(s) of electric or other log(s) run: Other
Electric Log Other Description: GR/DLL/MLL/CNL/LDT
Location of well, relative to nearest lease boundaries Off Lease : No
of lease on which this well is located: 1320.0 Feet from the North Line and
1320.0 Feet from the West Line of the
UNIVERSITY 20-12 Lease.

FORMER FIELD (WITH RESERVOIR) & GAS ID OR OIL LEASE NO.

Table with 4 columns: Field & Reservoir, Gas ID or Oil Lease No., Well No., Prior Service Type. Row 1: PACKET, BLOCK 20 (BONE SPRING), 35069, 1

W2: N/A

FOR NEW DRILL OR RE-ENTRY, SURFACE CASING DEPTH DETERMINED BY:

GAU Groundwater Protection Determination **Depth (ft.):** 325.0 **Date:** 12/16/2016
SWR 13 Exception **Depth (ft.):**

INITIAL POTENTIAL TEST DATA FOR NEW COMPLETION OR RECOMPLETION

Date of test: 03/20/2017 **Production method:** Pumping
Number of hours tested: 24 **Choke size:**
Was swab used during this test? No **Oil produced prior to test:** 201.00

PRODUCTION DURING TEST PERIOD:

Oil (BBLs): 25.00 **Gas (MCF):** 50
Gas - Oil Ratio: 2000 **Flowing Tubing Pressure:**
Water (BBLs): 52

CALCULATED 24-HOUR RATE

Oil (BBLs): 25.0 **Gas (MCF):** 50
Oil Gravity - API - 60.: 43.6 **Casing Pressure:**
Water (BBLs): 52

CASING RECORD

Row	Type of Casing	Casing Hole Size (in.)	Hole Size (in.)	Setting Depth (ft.)	Multi - Stage Depth (ft.)	Multi - Stage Shoe Depth (ft.)	Cement Class	Cement Amount (sacks)	Slurry Volume (cu. ft.)	Top of Cement (ft.)	TOC Determined By
1	Surface	13 3/8	17 1/2	495			C	550	890.0	SURF ACE	Circulated to Surface
2	Intermediate	8 5/8	11	4920			C	1500	2773.0	SURF ACE	Circulated to Surface
3	Conventional Production	5 1/2	7 7/8	12002			H	1950	3035.0	3950	Cement Evaluation Log

LINER RECORD

Row	Liner Size (in.)	Hole Size (in.)	Liner Top (ft.)	Liner Bottom (ft.)	Cement Class	Cement Amount (sacks)	Slurry Volume (cu. ft.)	Top of Cement (ft.)	TOC Determined By
1	3 1/2	4 1/2	11877	13467	H	115	135.7	11877	Circulated to Surface

TUBING RECORD

Row	Size (in.)	Depth Size (ft.)	Packer Depth (ft.)/Type
1	2 7/8	11859	/

PRODUCING/INJECTION/DISPOSAL INTERVAL

Row	Open hole?	From (ft.)	To (ft.)
1	No	L 11641	13462.0

ACID, FRACTURE, CEMENT SQUEEZE, CAST IRON BRIDGE PLUG, RETAINER, ETC.

Was hydraulic fracturing treatment performed? No

Is well equipped with a downhole actuation sleeve? No

If yes, actuation pressure (PSIG):

Production casing test pressure (PSIG) prior to hydraulic fracturing treatment:

Actual maximum pressure (PSIG) during hydraulic fracturing:

Has the hydraulic fracturing fluid disclosure been reported to FracFocus disclosure registry (SWR29)? No

Row	Type of Operation	Amount and Kind of Material Used	Depth Interval (ft.)	
1	Acid	15000 GALS 15% NEFE HCL	12045	13416
2	Acid	7500 GALS 15% NEFE HCL	12045	13462

FORMATION RECORD

Formations	Encountered	Depth TVD (ft.)	Depth MD (ft.)	Is formation isolated?	Remarks
RUSTLER - POSSIBLE FLOW; POSSIBLE USABLE QUALITY W COLBY-QUEEN	Yes	810.0		Yes	ENCOUNTERED
YATES	No			No	NOT ENCOUNTERED
QUEEN-SEVEN RIVERS	No			No	NOT ENCOUNTERED
SAN ANDRES - HIGH FLOWS, H2S, CORROSIVE HOLT	No			No	NOT ENCOUNTERED
DELAWARE	Yes	5144.0		Yes	ENCOUNTERED
GLORIETA	No			No	NOT ENCOUNTERED
CLEARFORK	No			No	NOT ENCOUNTERED
WICHITA ALBANY	No			No	NOT ENCOUNTERED
BRUSHY CANYON	Yes	7476.0		Yes	ENCOUNTERED
CHERRY CANYON	Yes	6363.0		Yes	ENCOUNTERED
CANYON	No			No	NOT ENCOUNTERED
BONE SPRINGS	Yes	9054.0		Yes	ENCOUNTERED
THIRD BONE SPRING SANDSTONE	Yes	11639.0		Yes	ENCOUNTERED
MONTOYA	No			No	NOT ENCOUNTERED
WADDELL	No			No	NOT ENCOUNTERED
WOLFCAMP	Yes	11812.0		Yes	ENCOUNTERED
ATOKA	No			No	NOT ENCOUNTERED
STRAWN	No			No	NOT ENCOUNTERED
PENNSYLVANIAN	No			No	NOT ENCOUNTERED
MISSISSIPPIAN	No			No	NOT ENCOUNTERED
DEVONIAN	No			No	NOT ENCOUNTERED
SILURIAN	No			No	NOT ENCOUNTERED
FUSSELMAN	No			No	NOT ENCOUNTERED
ELLENBURGER	No			No	NOT ENCOUNTERED

Do the producing interval of this well produce H2S with a concentration in excess of 100 ppm (SWR 36)? No
 Is the completion being downhole commingled (SWR 10)? No

REMARKS

A W-2 (TRK # 173758) WAS SUBMITTED 5-19-17 TO CORRECT 1997 WELLBORE HISTORY. BLOCK 20 (BONE SPRING) ID # 35069 HAS A CEMENT SQUEEZE AND BLOCK 20 (WOLFCAMP) ID# 34773, HAS BEEN THE PROD ZONE SINCE MAY 97. ALL COMPLETION DATA PROVIDED BY OPERATOR/CONSULTING ENGINEER. 1997 WELL BORE DATA ATTACHED.

RRC REMARKS

PUBLIC COMMENTS:

CASING RECORD :

TUBING RECORD:

PRODUCING/INJECTION/DISPOSAL INTERVAL :

ACID, FRACTURE, CEMENT SQUEEZE, CAST IRON BRIDGE PLUG, RETAINER, ETC. :

POTENTIAL TEST DATA:

OPERATOR'S CERTIFICATION

Printed Name: Susan Perkins
Telephone No.: (512) 772-1555

Title:
Date Certified: 05/24/2017



RAILROAD COMMISSION OF TEXAS

1701 N. Congress
P.O. Box 12967
Austin, Texas 78701-2967

Form W-15

Rev. 08/2014

CEMENTING REPORT

Cementor: Fill in shaded areas.
Operator: Fill in other items.

OPERATOR INFORMATION

Operator Name: WYCO Oil & Gas LLC	Operator P-5 No.: 945368
Cementor Name: Basic Energy Services	Cementor P-5 No.: 054313

WELL INFORMATION

District No.: 08	County: Winkler	
Well No.: 1	API No.: 495-32488	Drilling Permit No.: 821372
Lease Name: University 20-12	Lease No.: 34773	
Field Name: Block 20 (Wolfcamp)	Field No.: 093 16850	

I. CASING CEMENTING DATA

Type of casing: <input type="checkbox"/> Conductor <input type="checkbox"/> Surface <input type="checkbox"/> Intermediate <input checked="" type="checkbox"/> Liner <input type="checkbox"/> Production		
Drilled hole size (in.): 4.5	Depth of drilled hole (ft.): 13467	Est. % wash-out or hole enlargement:
Size of casing in O.D. (in.): 3.5	Casing weight (lbs/ft) and grade: 9.2	No. of centralizers used:
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO If no for surface casing, explain in Remarks.	Setting depth shoe (ft.): 13467 13466	Top of liner (ft.): 11877
Hrs. waiting on cement before drill-out:	Calculated top of cement (ft.): 10354.7	Setting depth liner (ft.): 13467
Cementing date: 2-16-17		

SLURRY

Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1	115	Class H	See Remarks	135.7	3112.3
2					
3					
Total	115			135.7	3112.3

II. CASING CEMENTING DATA

Type of casing: <input type="checkbox"/> Surface <input type="checkbox"/> Intermediate <input type="checkbox"/> Production <input type="checkbox"/> Tapered production <input type="checkbox"/> Multi-stage cement shoe <input type="checkbox"/> Multiple parallel strings		
Drilled hole size (in.):	Depth of drilled hole (ft.):	Est. % wash-out or hole enlargement:
Size of casing in O.D. (in.):	Casing weight (lbs/ft) and grade:	No. of centralizers used:
Tapered string drilled hole size (in.)	Tapered string depth of drilled hole (ft.)	
Upper:	Lower:	Upper:
Tapered string size of casing in O.D. (in.)	Tapered string casing weight(lbs/ft) and grade	Tapered string no. of centralizers used
Upper:	Lower:	Upper:
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input type="checkbox"/> YES <input type="checkbox"/> NO	Setting depth shoe (ft.):	
Hrs. waiting on cement before drill-out:	Calculated top of cement (ft.):	Cementing date:

SLURRY

Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1					
2					
3					
Total					

III. CASING CEMENTING DATA

Type of casing: <input type="checkbox"/> Surface <input type="checkbox"/> Intermediate <input type="checkbox"/> Production <input type="checkbox"/> Tapered production <input type="checkbox"/> Multi-stage cement/DV tool <input type="checkbox"/> Multiple parallel strings		
Drilled hole size (in.):	Depth of drilled hole (ft.):	Est. % wash-out or hole enlargement:
Size of casing in O.D. (in.):	Casing weight (lbs/ft) and grade:	No. of centralizers used:
Tapered string drilled hole size (in.)	Tapered string depth of drilled hole (ft.)	
Upper:	Lower:	Upper:
Tapered string size of casing in O.D. (in.)	Tapered string casing weight(lbs/ft) and grade	Tapered string no. of centralizers used
Upper:	Lower:	Upper:
Was cement circulated to ground surface (or bottom of cellar) outside casing? <input type="checkbox"/> YES <input type="checkbox"/> NO	Setting depth tool (ft.):	
Hrs. waiting on cement before drill-out:	Calculated top of cement (ft.):	Cementing date:

SLURRY

Slurry No.	No. of Sacks	Class	Additives	Volume (cu. ft.)	Height (ft.)
1					
2					
3					
Total					

CEMENTING TO SQUEEZE, PLUG BACK OR PLUG AND ABANDON

	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Cementing Date							
Size of hole or pipe (in.)							
Depth to bottom of tubing or drill pipe (ft.)							
Cement retainer setting depth (ft.)							
CIBP setting depth (ft.)							
Amount of cement on top of CIBP (ft.)							
Sacks of cement used							
Slurry volume pumped (cu. ft.)							
Calculated top of plug (ft.)							
Measured top of plug, if tagged (ft.)							
Slurry weight (lbs/gal)							
Class/type of cement							
Perforate and squeeze (YES/NO)							

REMARKS

Slurry 1 4/10% C-18 + 5/10% C-37 + 4/10% C-20

Calc TOC 10355, Actual TOC 11877 by circ. Pumped 100% excess.

CEMENTER'S CERTIFICATE: I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this certification, that the cementing of casing and/or the placing of cement plugs in this well as shown in the report was performed by me or under my supervision, and that the cementing data and facts presented on both sides of this form are true, correct, and complete, to the best of my knowledge. This certification covers cementing data only.

Aldo E. Mendoza, Field Service Supervisor

Basic Energy Services



Name and title of cementer's representative

Cementing Company

Signature

P. O. Box 10451

Midland

TX 79702

432-687-1994

2-22-17

Address

City, State, Zip Code

Tel: Area Code

Number

Date: mo. day yr.

OPERATOR'S CERTIFICATE: I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this certification, that I have knowledge of the well data and information presented in this report, and that data and facts presented on both sides of this form are true, correct, and complete, to the best of my knowledge. This certification covers all well data.

Kevin A. Myers

Consulting Engineer



Typed or printed name of operator's representative

Title

Signature

3004 Newell Road

Odessa, Tx 79762

432-413-4322

03/22/2017

Address

City, State, Zip Code

Tel: Area Code

Number

Date: mo. day yr.

Instructions for Form W-15, Cementing Report

NOTICE: The Form W-15 must be submitted as an attachment to a Form G-1 (Gas Well Back Pressure Test, Completion or Recompletion Report, and Log), Form W-2 (Oil Well Potential Test, Completion or Recompletion Report, and Log), Form W-3 (Plugging Record), or Form W-4 (Application for Multiple Completion), any time cement is pumped in a wellbore.

- A. What to file:** An operator should file an original and one copy of the completed Form W-15 for each cementing company used on a well. The cementing of different casing strings on a well by one cementing company may be reported on one form.
The Form W-15 should be filed with the Form W-3, Plugging Record, unless the Form W-3 is signed by the cementing company representative. When reporting dry holes, operators must complete Form W-15, in addition to Form W-3, to show any casing cemented in the hole.
- B. How to file:** An oil and gas completion report and Form W-15 may be filed online using the Commission's Online System (<https://webapps.rrc.state.tx.us/security/login.do>) or a paper copy of the form may be mailed to the Commission in Austin (P.O. Box 12967, Austin, Texas 78711-2967).
- C. Surface casing:** An operator must set and cement sufficient surface casing to protect all usable-quality water strata, as defined by the Groundwater Advisory Unit in Austin. Sufficient cement shall be used to fill the annular space outside the casing from the shoe to the ground surface or to the bottom of the cellar. Before drilling a well, an operator must obtain a letter from the Groundwater Advisory Unit stating the protection depth. Surface casing should not be set deeper than 200 feet below the specified depth without prior approval from the Commission.
To plug and abandon a well, operators must use only cementers approved by the Commission's Director of Field Operations in accordance with SWR 14 ([http://info.sos.state.tx.us/pls/pub/readtac\\$ext.TacPage?sl=R&app=9&p_dir=&p_floc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=16&pt=1&ch=3&rl=14](http://info.sos.state.tx.us/pls/pub/readtac$ext.TacPage?sl=R&app=9&p_dir=&p_floc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=16&pt=1&ch=3&rl=14)). Cementing companies, service companies, or operators can qualify as approved cementers by demonstrating that they are able to mix and pump cement in compliance with Commission rules and regulations.
- D. Estimated % wash-out:** If the estimated % wash-out is less than 20% (or 30% along the Gulf Coast), provide supporting documentation such as a caliper log to show how the estimated % wash-out was obtained.
- E. Multi-stage cement:** An operator must report the multi-stage cement shoe in II. Casing Cementing Data section by selecting the type of casing and Multi-stage cement shoe. The operator must report the multi-stage cement tool in III. Casing Cementing Data section by selecting the type of casing and Multi-stage cement/DV tool.
- F. Multiple parallel strings:** An operator should file the Form W-15 as an attachment to the Form W-4, Application for Multiple Completion. An operator may be required to submit multiple Form W-15s to show all data for multiple parallel strings.
- G. Slurry data:** If cement job exceeds three slurries, continue the list of slurries in the Slurry table in the subsequent Casing Cementing Data box.

**RAILROAD COMMISSION OF TEXAS
OIL AND GAS DIVISION**

Form W-12
(1-1-71)

INCLINATION REPORT (One Copy Must Be Filed With Each Completion Report.)		6. RRC District 8
1. FIELD NAME (as per RRC Records or Wildcat) <u>Block 20 (Wolfcamp)</u>		7. RRC Lease Number. (Oil completions only)
2. LEASE NAME University 20-12		8. Well Number #1
3. OPERATOR Pogo Producing Company		9. RRC Identification Number (Gas completions only)
4. ADDRESS P.O. Box 10340, Midland, Texas 79702		10. County Winkler
5. LOCATION (Section, Block, and Survey) Section 12, Block 20, ULS		

RECORD OF INCLINATION

*11. Measured Depth (feet)	12. Course Length (Hundreds of feet)	*13. Angle of Inclination (Degree)	14. Displacement per Hundred Feet (Sine of Angle X100)	15. Course Displacement (feet)	16. Accumulative Displacement (feet)
264	2.64	.50	.87	2.30	2.30
495	2.31	.25	.44	1.02	3.32
703	2.08	1.25	2.18	4.53	7.85
860	1.57	1.25	2.18	3.42	11.27
1,014	1.54	1.50	2.62	4.03	15.30
1,157	1.43	1.25	2.18	3.12	18.42
1,355	1.98	1.25	2.18	4.32	22.74
1,602	2.47	1.25	2.18	5.38	28.12
1,851	2.49	1.25	2.18	5.43	33.55
2,195	3.44	1.75	3.05	10.49	44.04
2,349	1.54	2.25	3.93	6.05	50.09
2,474	1.25	2.25	3.93	4.91	55.00
2,599	1.25	2.25	3.93	4.91	59.91
2,691	.92	2.25	3.93	3.62	63.53
2,785	.94	1.75	3.05	2.87	66.40
2,942	1.57	2.50	4.36	6.85	73.25

If additional space is needed, use the reverse side of this form.

17. Is any information shown on the reverse side of this form? yes no
18. Accumulative total displacement of well bore at total depth of 12,002 feet = 282.87 feet.
- *19. Inclination measurements were made in - Tubing Casing Open hole Drill Pipe
20. Distance from surface location of well to the nearest lease line 1320 feet.
21. Minimum distance to lease line as prescribed by field rules 467 feet.
22. Was the subject well at any time intentionally deviated from the vertical in any manner whatsoever?
(If the answer to the above question is "yes", attach written explanation of the circumstances.)

INCLINATION DATA CERTIFICATION

I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this certification, that I have personal knowledge of the inclination data and facts placed on both sides of this form and that such data and facts are true, correct, and complete to the best of my knowledge. This certification covers all data as indicated by asterisks (*) by the item numbers on this form.

Jeff Phillips
Signature of Authorized Representative
Jeff Phillips, Contracts Manager
Name of Person and Title (type or print)
TMBR/Sharp Drilling, Inc.
Name of Company
Telephone: 915 699-5050
Area Code

OPERATOR CERTIFICATION

I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this certification, that I have personal knowledge of all information presented in this report, and that all data presented on both sides of this form are true, correct, and complete to the best of my knowledge. This certification covers all data and information presented herein except inclination data as indicated by asterisks (*) by the item numbers on this form.

Richard L. Wright
Signature of Authorized Representative
Richard L. Wright, Division Operations Manager
Name of Person and Title (type or print)
Pogo Producing Company
Operator
Telephone: (915) 682-6822
Area Code

Railroad Commission Use Only:

Approved By: RS Young Title: ad Seal Date: 12-13-75

* Designates items certified by company that conducted the inclination surveys.

RECORD OF INCLINATION (Continued from reverse side)

*11. Measured Depth (feet)	12. Course Length (Hundreds of feet)	*13. Angle of Inclination (Degrees)	14. Displacement per Hundred Feet (Sine of Angle X100)	15. Course Displacement (feet)	16. Accumulative Displacement (feet)
3,033	.91	2.25	3.93	3.58	76.83
3,218	1.85	3.25	5.67	10.49	87.32
3,312	.94	3.25	5.67	5.33	92.65
3,376	.64	3.25	5.67	3.63	96.28
3,500	1.24	3.25	5.67	7.03	103.31
3,594	.94	2.75	4.80	4.51	107.82
3,755	1.61	1.75	3.05	4.91	112.73
3,939	1.84	3.25	5.67	10.43	123.16
4,030	.91	3.00	5.23	4.76	127.92
4,123	.93	2.75	4.80	4.46	132.38
4,216	.93	2.25	3.93	3.65	136.03
4,311	.95	1.00	1.75	1.66	137.69
4,433	1.22	1.25	2.18	2.66	140.35
4,527	.94	1.75	3.05	2.87	143.22
4,620	.93	1.75	3.05	2.84	146.06
4,710	.90	2.50	4.36	3.92	149.98
4,841	1.31	2.00	3.49	4.57	154.55
4,920	.79	2.00	3.49	2.76	157.31
5,157	2.37	1.00	1.75	4.15	161.46
5,657	5.00	.75	1.31	6.55	168.01
6,147	4.90	.75	1.31	6.42	174.43
6,555	4.08	.25	.44	1.80	176.23
7,052	4.97	.25	.44	2.19	178.42
7,580	5.28	.75	1.31	6.92	185.34
8,014	4.34	.25	.44	1.91	187.25
8,323	3.09	1.50	2.62	8.10	195.35
8,483	1.60	1.50	2.62	4.19	199.54
8,731	2.48	1.25	2.18	5.41	204.95
8,981	2.50	1.75	3.05	7.63	212.58
9,073	.92	1.75	3.05	2.81	215.39
9,167	.94	2.00	3.49	3.28	218.67
9,312	1.45	2.00	3.49	5.06	223.73
9,416	1.04	1.50	2.62	2.72	226.45
9,540	1.24	1.75	3.05	3.78	230.23
9,662	1.22	1.75	3.05	3.72	233.95
9,909	2.47	1.75	3.05	7.53	241.48
9,972	.63	1.50	2.62	1.65	234.13
10,220	2.48	1.25	2.18	5.41	248.54
10,469	2.49	1.25	2.18	5.43	253.97
10,714	2.45	.50	.87	2.13	256.10
10,967	2.53	1.00	1.75	4.43	260.53

If additional space is needed, attach separate sheet and check here.

REMARKS: _____

- INSTRUCTIONS -

An inclination survey made by persons or concerns approved by the Commission shall be filed on a form prescribed by the Commission for each well drilled or deepened with rotary tools or when, as a result of any operation, the course of the well is changed. No inclination survey is required on wells that are drilled and completed as dry holes that are plugged and abandoned. (Inclination surveys are required on re-entry of abandoned wells.) Inclination surveys must be made in accordance with the provisions of Statewide Rule 11.

This report shall be filed in the District Office of the Commission for the district in which the well is drilled, by attaching one copy to each appropriate completion for the well. (except Plugging Report)

The Commission may require the submittal of the original charts, graphs, or discs, results from the surveys.

**RAILROAD COMMISSION OF TEXAS
OIL AND GAS DIVISION**

Form W-12
(1-1-71)

INCLINATION REPORT (One Copy Must Be Filed With Each Completion Report.)		6. RRC District 08
1. FIELD NAME (as per RRC Records or Wildcat) Block 20 (Wolfcamp)	2. LEASE NAME University 20-12	7. RRC Lease Number. (Oil completions only) 34773
3. OPERATOR WYCO Oil + Gas LLC		8. Well Number 1
4. ADDRESS 50 Kahala, Odessa, TX 79762		9. RRC Identification Number (Gas completions only)
5. LOCATION (Section, Block, and Survey) Section 12, Block 20, University Lands Survey		10. County Winkler

RECORD OF INCLINATION

*11. Measured Depth (feet)	12. Course Length (Hundreds of feet)	*13. Angle of Inclination (Degrees)	14. Displacement per Hundred Feet (Sine of Angle X100)	15. Course Displacement (feet)	16. Accumulative Displacement (feet)
12002	*	*	*	*	282.87
12076	0.74	1.03	1.79	1.32	284.19
12167	0.91	1.07	1.87	1.70	285.89
12291	1.24	0.94	1.64	2.03	287.92
12413	1.22	1.55	2.70	3.29	291.21
12536	1.23	1.23	2.15	2.64	293.85
12658	1.22	1.42	2.48	3.03	296.88
12781	1.23	1.38	2.41	2.96	299.84
12905	1.24	1.21	2.11	2.62	302.46
13025	1.20	1.35	2.36	2.83	305.29
13119	0.94	1.59	2.77	2.60	307.89
13241	1.22	0.99	1.73	2.11	310.00
13395	1.54	1.38	2.41	3.71	313.71
13419	0.24	0.98	1.71	0.41	314.12
13467	0.48	0.98	1.71	0.82	314.94

If additional space is needed, use the reverse side of this form.

17. Is any information shown on the reverse side of this form? yes no, but
18. Accumulative total displacement of well bore at total depth of 13467 feet = 314.94 feet.
- *19. Inclination measurements were made in -- Tubing Casing Open hole Drill Pipe
20. Distance from surface location of well to the nearest lease line 660 feet.
21. Minimum distance to lease line as prescribed by field rules 467 feet.
22. Was the subject well at any time intentionally deviated from the vertical in any manner whatsoever? No
- (If the answer to the above question is "yes", attach written explanation of the circumstances.) * See W-12 from original drilling.

<p>INCLINATION DATA CERTIFICATION</p> <p>I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this certification, that I have personal knowledge of the inclination data and facts placed on both sides of this form and that such data and facts are true, correct, and complete to the best of my knowledge. This certification covers all data as indicated by asterisks (*) by the item numbers on this form.</p> <p>Signature of Authorized Representative: <u>[Signature]</u></p> <p>Name of Person and Title (type or print): <u>MWD Coordinator</u></p> <p>Name of Company: <u>Scientific Drilling</u></p> <p>Telephone: <u>432 689-5600</u></p> <p>Area Code: <u>432</u></p>	<p>OPERATOR CERTIFICATION</p> <p>I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this certification, that I have personal knowledge of all information presented in this report, and that all data presented on both sides of this form are true, correct, and complete to the best of my knowledge. This certification covers all data and information presented herein except inclination data as indicated by asterisks (*) by the item numbers on this form.</p> <p>Signature of Authorized Representative: <u>[Signature]</u></p> <p>Name of Person and Title (type or print): <u>Kevin A. Myers, consultant</u></p> <p>Operator: <u>WYCO Oil + Gas LLC</u></p> <p>Telephone: <u>432 413-4322</u></p> <p>Area Code: <u>432</u></p>
---	--

Railroad Commission Use Only:

Approved By: _____ Title: _____ Date: _____

* designates items certified by company that conducted the inclination surveys.

Tracking No.: 170916

This facsimile L-1 was generated electronically from data submitted to the RRC.

Instructions

When to File Form L-1:

- with Forms G-1, W-2, and GT-1 for new and deepened gas, oil, and geothermal wells
- with Form W-3 for plugged dry holes
- when sending in a log which was held under a request for confidentiality and the period for confidentiality has not yet expired.

When is Form L-1 NOT required:

- with Forms W-2, G-1, and GT-1 filed for injection wells, disposal wells, water supply wells, service wells, re-test wells, re-classifications, and plugbacks of oil, gas or geothermal wells
- with Form W-3 for plugging of other than a dry hole

Where to File Form L-1:

- with the appropriate Commission district office

Filling out Form L-1:

- Section I and the signature section must be filled out for all wells
- complete only the appropriate part of Section II

Type of log required:

- any wireline survey run for the purpose of obtaining lithology, porosity, or resistivity information
- no more than one such log is required but it must be of the subject well
- if such log is NOT run on the subject well, do NOT substitute any other type of log; just select Section II, Part A below

SECTION I. IDENTIFICATION

Operator Name: WYCO OIL & GAS LLC	District No. 08	Completion Date: 02/27/2017
Field Name PHANTOM (WOLFCAMP)	Drilling Permit No. 821372	
Lease Name UNIV. 20-12	Lease/ID No. 48648	Well No. 1
County WINKLER	API No. 42- 495-32488	

SECTION II. LOG STATUS (Complete either A or B)

A. BASIC ELECTRIC LOG NOT RUN

B. BASIC ELECTRIC LOG RUN. (Select one)

- 1. Confidentiality is requested and a copy of the header for each log that has been run on the well is attached.
- 2. Confidentiality already granted on basic electric log covering this interval (applicable to deepened wells only).
- 3. Basic electric log covering this interval already on file with Commission (applicable to deepened wells only).
- 4. Log attached to (select one):
 - (a) Form L-1 (this form). If the company/lease name on log is different from that shown in Section I, please enter name on log here: _____
 Check here if attached log is being submitted after being held confidential.
 - (b) Form P-7, Application for Discovery Allowable and New Field Designation.
 - (c) Form W-4, Application for Multiple Completion:
 Lease or ID No(s). _____
 Well No(s). _____

Susan Perkins

Signature

Name (print)

Title

(512) 772-1555

Phone

05/10/2017

Date

-FOR RAILROAD COMMISSION USE ONLY-

**Weatherford®**

**PHOTO DENSITY
COMPENSATED NEUTRON
GAMMA RAY**

COMPANY	WYCO OIL & GAS LLC		
WELL	UNIVERSITY 20-12 #1		
FIELD	BLOCK 20 (WOLFCAMP)		
PROVINCE/COUNTY	WINKLER		
COUNTRY/STATE	U.S.A / TEXAS		
LOCATION	1320' FNL & 1320' FWL		
PERMIT NUMBER	821372, SECTION 12, BLOCK 20, SURVEY UL		
SEC 12	TWP	RGE	Other Services
Latitude	31.741718		DUAL LATEROLOG
Longitude	-103.292356		MICRO LATEROLOG
API Number	42-495-32488		
Permanent Datum GL, Elevation 2817 feet		Elevations:	feet
Log Measured From KB		KB	2831
Drilling Measured From KB		DF	2830
		GL	2817
Date	14-FEB-2017		
Run Number	TWO		
Service Order	17627-174186639		
Depth Driller	13467.00	feet	
Depth Logger	13449.00	feet	
First Reading	13446.38	feet	
Last Reading	12005.00	feet	
Casing Driller	12002.00	feet	
Casing Logger	12005.00	feet	
Bit Size	4.500	inches	
Hole Fluid Type	BRINE POLYMER		
Density / Viscosity	10.50 lb/USg	45.00 sec/qt.	
PH / Fluid Loss	7.50	10.00 ml/30Min	
Sample Source	PIT		
Rm @ Measured Temp	0.101 @ 55.3	ohm-m	
Rmf @ Measured Temp	0.076 @ 55.3	ohm-m	
Rmc @ Measured Temp	0.126 @ 55.3	ohm-m	
Source Rmf / Rmc	PIT	PIT	
Rm @ BHT	0.033 @187.0	ohm-m	
Time Since Circulation	9 HOURS		
Max Recorded Temp	187.00	deg F	
Equipment / Base	13243	4352	
Recorded By	KATHRYN WOOD		
Witnessed By	KEVIN MYERS		

**Weatherford®**

**DUAL LATEROLOG
MICRO LATEROLOG
GAMMA RAY**

COMPANY	WYCO OIL & GAS LLC		
WELL	UNIVERSITY 20-12 #1		
FIELD	BLOCK 20 (WOLFCAMP)		
PROVINCE/COUNTY	WINKLER		
COUNTRY/STATE	U.S.A / TEXAS		
LOCATION	1320' FNL & 1320' FWL		
PERMIT NUMBER	821372, SECTION 12, BLOCK 20, SURVEY UL		
SEC 12	TWP	RGE	Other Services
Latitude	31.741718		PHOTO DENSITY
Longitude	-103.292356		COMPENSATED NEUTRON
API Number	42-495-32488		
Permanent Datum GL, Elevation 2817 feet		Elevations:	feet
Log Measured From KB		KB	2831
Drilling Measured From KB		DF	2830
		GL	2817
Date	14-FEB-2017		
Run Number	TWO		
Service Order	17627-174186639		
Depth Driller	13467.00	feet	
Depth Logger	13449.00	feet	
First Reading	13443.86	feet	
Last Reading	12005.00	feet	
Casing Driller	12002.00	feet	
Casing Logger	12005.00	feet	
Bit Size	4.500	inches	
Hole Fluid Type	BRINE POLYMER		
Density / Viscosity	10.50 lb/USg	45.00 sec/qt.	
PH / Fluid Loss	7.50	10.00 ml/30Min	
Sample Source	PIT		
Rm @ Measured Temp	0.101 @ 55.3	ohm-m	
Rmf @ Measured Temp	0.076 @ 55.3	ohm-m	
Rmc @ Measured Temp	0.126 @ 55.3	ohm-m	
Source Rmf / Rmc	PIT	PIT	
Rm @ BHT	0.033 @187.0	ohm-m	
Time Since Circulation	9 HOURS		
Max Recorded Temp	187.00	deg F	
Equipment / Base	13243	4352	
Recorded By	KATHRYN WOOD		
Witnessed By	KEVIN MYERS		



RAILROAD COMMISSION OF TEXAS

1701 N. Congress
P.O. Box 12967
Austin, Texas 78701-2967

Form P-16

Page 1

Rev. 01/2016

Acreage Designation

SECTION I. OPERATOR INFORMATION

Operator Name: WYCO OIL & GAS LLC Operator P-5 No.: 945368
Operator Address: PO BOX 12367, ODESSA, TX 79768

SECTION II. WELL INFORMATION

District No.: 08 County: Winkler
Well No.: 1 API No.: 495-32488
Total Lease Acres: 40 Drilling Permit No.:
Lease Name: UNIVERSITY 20-12 Lease No.:
Field Name: PHANTOM (WOLF CAMP) Field No.: 71052900
Purpose of Filing: [X] Drilling Permit Application (Form W-1) [] Completion Report (Form G-1/W-2)

Filer is the owner or lessee, or has been authorized by the owner or lessee, of all or an undivided portion of the mineral estate under each tract for which filer is listed as operator below. For all leases operated by other entities, the number of assigned acres shown are reflected on current Commission records or the filer has been authorized by the current operator to change the assigned acreage of that operator as shown below.

SECTION III. LISTING OF ALL WELLS IN THE APPLIED-FOR FIELD ON THE SAME ACREAGE AS THE LEASE, POOLED UNIT, OR UNITIZED TRACT DESIGNATED IN SECTION II ABOVE BY FILER

Table with 8 columns: RRC ID No. or Lease No., Well No., H-Horizontal D-Directional V-Vertical, Lease Name, API No., Acres Assigned, SWR 38 Except. (Y/N), Operator Name and Operator No. (if different from filing operator). Row 1: 1, V, UNIVERSITY 20-12, 495, 32488, 40, N.

Total Well Count > 1
< A. Total Assigned Horiz. Acreage 40
< Total Remaining Horiz. Acreage 0
< B. Total Assigned Vert./Dir. Acreage 40
< Total Remaining Vert./Dir. Acreage 0
< C. Total Assigned Acreage 40
< Total Remaining Acreage 0

SECTION IV. REMARKS / PURPOSE OF FILING (see instructions)

Empty box for remarks or purpose of filing.

Attach Additional Pages As Needed. [X] No additional pages [] Additional Pages: (No. of additional pages)

CERTIFICATION: I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that this report was prepared by me or under my supervision or direction, that I am authorized to make this report, and that the information contained in this report is true, correct, and complete to the best of my knowledge.

Signature: Susan Perkins Name and title: CONSULTANT Email: 432-556-6579 Date: 6-13-17
Address: PO Box 12367, Midland, TX 79768 City, State, Zip Code Tel: Area Code Number Date: mo. day yr.

June 7, 2017

RE: Wyco Oil & Gas LLC – Tracking #170916, Message response dated 6-5-17
University 20-12 #1 – API 495-32488 – Clarification of perf designation

The initial (November 1995) completion on WYCO's University 20-12 #1 indicated perfs from 11700' - 11806', which are geologically located within the Third Bone Springs Sandstone formation. In the Block 20 area, the Railroad Commission has, historically, included the Third Bone Springs Sandstone within the officially designated Wolfcamp reservoir. WYCO's well was approved by the RRC for original completion in the Block 20 (Wolfcamp) field.

The currently submitted W-2 completion added new perforations from 11641' to 13462'. The bottom portion of this new interval (below 11806'), clearly lies within the Wolfcamp reservoir by any reasonable geological definition. The portion from 11641' to 11806' geologically lies within the Third Bone Spring Sandstone, but is officially part of the designated pay interval for the Block 20 (Wolfcamp) field. This is confirmed by RRC approval of the Block 20 (Wolfcamp) field designation for the original 1995 completion of WYCO's well at 11700' - 11806', as well as the additional information outlined below.

Following are two nearby wells where completions in the Third Bone Springs Sandstone pay interval were also approved by the RRC as being within the officially designated Block 20 (Wolfcamp) field:

API 42-495-32413, 03/1993, completion interval 11679' - 11784'

This is the discovery well completion for the Block 20 (Wolfcamp) field, and this well is the direct west offset to WYCO's well. This completion interval directly correlates to the initial completion interval (11700' – 11806') in WYCO's well, which is included within the upper portion of the current completion interval.

API 42-495-32521, 04/1996, completion interval 11660' - 11692'

The RRC approved the designation of this well completion as being in the Block 20 (Wolfcamp) field, yet this completion interval also geologically lies within the Third Bone Springs Sand. The upper portion of this completion interval correlates to the uppermost portion of the new completion interval in WYCO's well.

Finally, the uppermost past completion interval in WYCO's well (which is now plugged off) is the discovery well completion for the Block 20 (Bone Springs) field. The officially designated pay interval for the Block 20 (Bone Springs) field is geologically located in the Second Bone Springs CARBONATE, at depths of 10310' - 10354', over 1300 feet shallower than any of the current completion intervals in WYCO's well.

Therefore, the entire present completion interval clearly lies within the officially designated Block 20 (WOLFCAMP) field, and NOT within the officially designated Block 20 (Bone Springs) field.

Thank you for considering this information, and please let me know if you have any additional questions.

Kevin Myers
Myers Engineering
432-413-4322

MYERS ENGINEERING

3004 Newell Road, Odessa, Texas 79762
Phone: 432-413-4322, Fax: 432-272-0965, E-mail: Kevin.Myers@MyersOil.com

April 30, 2017

Texas Railroad Commission
Oil & Gas Division
P.O. Box 12967
Austin, Texas 78711-2967

Re: Letter of Explanation and Request for Correction of RRC Records
WYCO Oil & Gas LLC (Operator No. 945368)
University 20-12 Lease
Well No. 1 (API No. 42-495-32488)
Block 20 (Wolfcamp) Field (Lease No. 34773)
Block 20 (Bone Springs) Field (Lease No. 35069)
Winkler County, Texas

Gentlemen:

WYCO Oil & Gas LLC recently received a drilling permit (Permit No. 821372) to deepen the subject well for completion in the RRC designated Block 20 (Wolfcamp) reservoir. WYCO has now completed the corresponding well work, and will therefore be filing a W-2 and associated forms. However, in the process of preparing to file these forms, WYCO became aware that RRC records regarding this well are presently incorrect because of a filing deficiency by a prior operator of this well. As a result, WYCO is also filing another W-2 and related documents to report work that was performed by the prior operator back in 1997.

Briefly, the subject well is presently listed as producing from the Block 20 (Bone Spring) field, when in fact that zone was cement squeezed in May of 1997. At that time the well was returned to production from the Block 20 (Wolfcamp) field that had been temporarily abandoned previously. It has been producing from the Wolfcamp ever since. A list of relevant events in the life of this well may be found in the attached chronology. Copies of all well file documents in WYCO's possession that document the unreported well work are attached.

In reviewing the attached documents, please be aware that Pogo's own personnel were apparently confused between the Wolfcamp and Bone Springs reservoir designations, and mistakenly used the wrong reservoir names on some of the documents. This confusion arises from the fact that the RRC designated "Wolfcamp" reservoir includes the Third Bone Springs Sandstone interval. Therefore, please be sure to take note of the actual DEPTHS that are referenced in the attached documents, rather than counting on accuracy of the reported reservoir names.

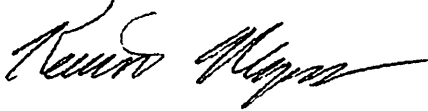
Once again, the bottom line of all of this is that production from the subject well has been reported in the Bone Springs under lease number 35069 through the present date, when in fact this well has been producing from the Wolfcamp reservoir since May 1997. Therefore the all of the production over this time period should have been reported under lease number 34773, and RRC records should be corrected to address this issue. WYCO is unable to report production

MYERS ENGINEERING

3004 Newell Road, Odessa, Texas 79762
Phone: 432-413-4322, Fax: 432-272-0965, E-mail: Kevin.Myers@MyersOil.com

under the correct lease number (34773) until these issues have been resolved by the RRC, and would therefore appreciate your prompt attention to this matter.

Sincerely,



Kevin A. Myers
Consulting Engineer for WYCO Oil & Gas LLC

MYERS ENGINEERING

3004 Newell Road, Odessa, Texas 79762
Phone: 432-413-4322, Fax: 432-272-0965, E-mail: Kevin.Myers@MyersOil.com

**WYCO Oil & Gas LLC (Operator No. 945368)
University 20-12 #1 (API 42-495-32488)
Block 20 (Bone Springs) Field (Lease No. 35069)
Block 20 (Wolfcamp) Field (Lease No. 34773)
Winkler County, Texas**

Chronology of Events

- 12/05/1995 - Pogo Producing Company completed the Wolfcamp reservoir at 11700' - 11806' and properly reported this completion to the RRC.
- 05/31/1996 - Pogo temporarily abandoned the Wolfcamp with a packer and plug set at 11470'.
- 08/07/1996 - Pogo completed the Bone Springs reservoir at 10310' - 10354' and properly reported this completion to the RRC.
- 03/27/1997 - Pogo tagged plug at 11470' between Bone Springs and Wolfcamp, got immediate pressure at surface, well started flowing.
- 05/15/1997 - **Pogo squeezed the Bone Springs perms at 10310' - 10354' with 100 sacks Class H cement, permanently abandoning the Bone Springs completion interval.**
- 05/17/1997 - **Pogo drilled out cement through squeezed interval, tested squeezed interval to 1500 psi, then drilled out plug above Wolfcamp perms.**
- 05/19/1997 - **Pogo returned well to production from original Wolfcamp perms at 11700' - 11806'. Apparently no change in well status was reported to the RRC. Pogo continued to report production under the Bone Springs reservoir (lease no. 35069) rather than the Wolfcamp (lease no. 34773).**
- 03/01/2008 - Oxy USA Inc. acquired the well from Pogo.
- 07/01/2013 - Oxy lost the lease due to lack of production.
- 03/19/2014 - WYCO acquired the lease at a University Lands lease sale.
- 04/01/2014 - WYCO acquired the wellbore rights from Oxy.
- 04/07/2014 - WYCO received a P-4 for the Wolfcamp (34773) from Oxy, who failed to provide the Bone Springs P-4.
- 08/01/2014 - WYCO resumed production by intermittently flowing the well. WYCO initially filed the production under lease number 34773, because that was the only P-4 received to date from Oxy, and WYCO therefore assumed it represented the correct lease.
- 05/??/2015 - WYCO became aware that lease number 34773 was designated inactive (temporarily abandoned), and requested a P-4 for lease number 35069 from Oxy, under which Oxy (and Pogo) had been previously filing production.
- 06/03/2015 - WYCO received a P-4 for the Bone Springs (35069) from Oxy, and re-filed production since 08/2014 with the RRC under this lease number, once again assuming that Oxy's and Pogo's prior filings were correct.
- 12/16/2016 - WYCO applied for a drilling permit to deepen well further into the Wolfcamp.
- 12/30/2016 - WYCO received a permit from RRC to deepen the well.
- 02/26/2017 - WYCO completed deepening operations.
- 03/21/2017 - While preparing completion forms, WYCO personnel noted that the well was actually producing from the Wolfcamp reservoir (34773) prior to WYCO's deepening, even though production was being reported under the Bone Springs reservoir (35069) because Pogo failed to file forms regarding the well work that was performed in May 1997.

LETTER DATED 9-18-95

RAILROAD COMMISSION OF TEXAS

Type or print option Dated 13 3/8 @ 495 ft. D.V. @

Oil and Gas Division

Form W-2 Rev. 4/1/83 483-046

API No. 42-495-32488

7. RRC District No. 8

8. RRC Lease No. 34773

Oil Well Potential Test, Completion or Recompletion Report, and Log

1. FIELD NAME (as per RRC Records or Wildcat) Blk 20 (Wolfcamp)

2. LEASE NAME University 20-12

9. Well No. 1

3. OPERATOR'S NAME (Exactly as shown on Form P-5, Organization Report) Pogo Producing Company

RRC Operator No. 668900

10. County of well site Winkler

4. ADDRESS P. O. Box 10340, Midland

11. Purpose of filing Initial Potential [XX]

5. If Operator has changed within last 60 days, name former operator

Retest []

Reclass []

Well record only (explain in Remarks) []

6a. Location (Section, Block, and Survey) Sec. 12, Blk. 20, Univ. Lds. Survey

6b. Distance and direction to nearest town in this county. 7 miles west of Wink

12. If workover or reclass, give former field (with reservoir) & gas ID or oil lease no. FIELD & RESERVOIR

GAS ID or OIL LEASE "

OIL - O Gas - G

WELL NO

RECORD CODIFICATION

13. Type of electric or other log run CNL-CFL-Density-CBL

JAN 17 1996

14. Completion or recompletion date 11/12/95

SECTION I: POTENTIAL TEST DATA IMPORTANT: Test should be for 24 hours unless otherwise specified in field rules.

Table with 6 columns: 15. Date of test (12/5/95), 16. No. of hours tested (24), 17. Production method (Flowing), 18. Choke size (16/64"), 19. Production during Test Period (Oil: 223, Gas: 200, Water: 102, Ratio: 896:1), 20. Calculated 24-Hour Rate (Oil: 223, Gas: 200, Water: 102, Ratio: 43.6), 21. Was swab used during this test? (No), 22. Oil produced prior to test (2500 bbls), 23. Injection Gas-Oil Ratio (500 PSI).

REMARKS.

Return to Central Records

INSTRUCTIONS: File an original and one copy of the completed Form W-2 in the appropriate RRC District Office within 30 days after completing a well and within 10 days after a potential test. If an operator does not properly report the results of a potential test within the 10-day period, the effective date of the allowable assigned to the well will not extend back more than 10 days before the W-2 was received in the District Office. (Statewide Rules 16 and 51) To report a completion or recompletion, fill in both sides of this form. To report a retest, fill in only the front side.

WELL TESTER'S CERTIFICATION

I declare under penalties prescribed in Sec 91.143, Texas Natural Resources Code, that I conducted or supervised this test by observation of (a) meter readings or (b) the top and bottom gauges of each tank into which production was run during the test. I further certify that the potential test data shown above is true, correct, and complete, to the best of my knowledge.

Signature: Well Tester

Name of Company

RRC Representative

RECEIVED R.R.C. OF TEXAS DEC 11 1995 MIDLAND, TEXAS

OPERATOR'S CERTIFICATION

I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this report, that this report was prepared by me or under my supervision and direction, and that data and facts stated therein are true, correct, and complete, to the best of my knowledge.

Barrett L. Smith

Senior Operations Engineer

(915)682-6822

12 / 17 / 95

Telephone. Area Code Number

Date mo. day year

Signature

495-32488

MAPPING

Handwritten signature

DEC 23 1995

SECTION II DATA ON WELL COMPLETION AND LOG (Not Required on Retest)

24. Type of Completion: New Well <input checked="" type="checkbox"/> Deepening <input type="checkbox"/> Plug Back <input type="checkbox"/> Other <input type="checkbox"/>				25. Permit to Drill, Plug Back or Deepen DATE 7/31/95 PERMIT NO. 438260	
26. Notice of Intention to Drill this well was filed in Name of Pogo Producing Company				Rule 37 CASE NO. Exception Water Injection PERMIT NO. Permit Salt Water Disposal PERMIT NO. Permit Other PERMIT NO.	
27. Number of producing wells on this lease in this field (reservoir) including this well 1st Well		28. Total number of acres in this lease 640			
29. Date Plug Back, Deepening, WorkOver or Drilling Operations: 10/10/95		Commenced 11/2/95		30. Distance to nearest well, Same Lease & Reservoir 1st Well	
31. Location of well, relative to nearest lease boundaries of lease on which this well is located 1320 Feet From North Line and 1320 Feet from West Line of the University 20-12 Lease			33. Was directional survey made other than inclination (Form W-12)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
32. Elevation (DF, RKB, RT, GR, ETC.) 2817' GR					
34. Top of Pay	35. Total Depth 12002'	36. P. B. Depth 11967'	37. Surface Casing Determined by: Field <input checked="" type="checkbox"/> Rules	Recommendation of T.D.W.R. Railroad Commission (Special) <input type="checkbox"/>	
38. Is well multiple completion? No		39. If multiple completion, list all reservoir names (completions in this well) and Oil Lease or Gas ID No. FIELD & RESERVOIR			40. Intervals Drilled by: Rotary Tools <input checked="" type="checkbox"/> Cable Tools
41. Name of Drilling Contractor Timber Sharp				42. Is Cementing Affidavit Attached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

43. CASING RECORD (Report All Strings Set in Well)

CASING SIZE	WT #/FT.	DEPTH SET	MULTISTAGE TOOL DEPTH	TYPE & AMOUNT CEMENT (sacks)	HOLE SIZE	TOP OF CEMENT	SLURRY VOL. cu. ft.
13-3/8	54.5#	495		550 sxs C1 C	17-1/2	surf	890
8-5/8	32#	4920		1500sxs C1 C	11	surf	2773
5-1/2	23#	12002		1950sxs C1 H	7-7/8	3950	3034.5

44. LINER RECORD

Size	TOP	Bottom	Sacks Cement	Screen

45. TUBING RECORD

Size	Depth Set	Packer Set	From	To
None			11700'	11806'
			From	To
			From	To
			From	To

46. Producing Interval (this completion) Indicate depth of perforation or open hole

From	To
11700'	11806'
From	To
From	To
From	To

47. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

Depth Interval	Amount and Kind of Material Used
11700 - 11806	Acidz w/ 2000 gals 15% NeFe HCl Frac w/ 152,000# 20/40 sand

48. FORMATION RECORD (LIST DEPTHS OF PRINCIPAL GEOLOGICAL MARKERS AND FORMATION TOPS)

Formations	Depth	Formations	Depth

REMARKS

RAILROAD COMMISSION OF TEXAS
Oil and Gas Division

Form W-2
Rev. 4/1/83
483-046

Type or print only

09316 - 050

API No. 42- 495-32488

7. RRC District No.
8

Oil Well Potential Test, Completion or Recompletion Report, and Log

8. RRC Lease No.
84773-35069

1. FIELD NAME (as per RRC Records or Wildcat) BLOCK 20 (BONE SPRING)		2. LEASE NAME University 20-12		HECEIVED		9. Well No. 1			
3. OPERATOR'S NAME (Exactly as shown on Form P-5, Organization Report) Pogo Producing Company			RRC Operator No. 668900		R.R.C. OF TEXAS		10. County of well site Winkler		
4. ADDRESS P. O. Box 10340, Midland, TX 79702-7340				SEP - 3 1996		11. Purpose of filing			
5. If Operator has changed within last 60 days, name former operator				O.G. MIDLAND, TEXAS		Initial Potential <input checked="" type="checkbox"/>			
6a. Location (Section, Block, and Survey) Sec. 12, Blk. 20, ULS				6b. Distance and direction to nearest town in this county 15 miles West of Wink				Retest <input type="checkbox"/>	
12. If workover or reclass, give former field (with reservoir) & gas ID or oil lease no. FIELD & RESERVOIR Block 20 (Wolfcamp)		GAS ID or OIL LEASE # 34773		Oil - O Gas - G 0		WELL NO. 1		11. Purpose of filing Reclass <input type="checkbox"/>	
13. Type of electric or other log run				14. Completion or recompletion date 8/4/96		Well record only (explain in Remarks) <input type="checkbox"/>			

SECTION I: POTENTIAL TEST DATA IMPORTANT: Test should be for 24 hours unless otherwise specified in field rules.

15. Date of test 8/7/96	16. No. of hours tested 24	17. Production method (Flowing, Gas Lift, Jetting, Pumping— Size & Type of pump) Pumping 1-1/4" insert			18. Choke size
19. Production during Test Period	Oil - BBLs 92	Gas - MCF 46	Water - BBLs 92	Gas - Oil Ratio 500:1	Flowing Tubing Pressure PSI
20. Calculated 24-Hour Rate	Oil - BBLs 92	Gas - MCF 46	Water - BBLs 92	Oil Gravity—API—60° 42.1	Casing Pressure PSI
21. Was swab used during this test? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		22. Oil produced prior to test (New & Reworked wells) 600 bbls			23. Injection Gas—Oil Ratio

REMARKS. Plug backed well by setting RBP @ 11,500' & dumping 5 sxs sand on top. Opened Bone Springs Lime 10,310'-10,354'. Request to rename field Block 20 Bone Springs and leave both permits open due to future plans to commingle Bone Springs and Wolfcamp zones.

INSTRUCTIONS: File an original and one copy of the completed Form W-2 in the appropriate RRC District Office within 30 days after completing a well and within 10 days after a potential test. If an operator does not properly report the results of a potential test within the 10-day period, the effective date of the allowable assigned to the well will not extend back more than 10 days before the W-2 was received in the District Office. (Statewide Rules 16 and 51) To report a completion or recompletion, fill in both sides of this form. To report a **RECORD CODIFICATION** fill in only the front side.

NOV 07 1996

WELL TESTER'S CERTIFICATION

I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I conducted or supervised this test by observation of (a) meter readings or (b) the top and bottom gauges of each tank into which production was run during the test. I further certify that the potential test data shown above is true, correct, and complete, to the best of my knowledge.

RECEIVED R.R.C. OF TEXAS

Signature: Well Tester

Name of Company

RRC Representative

SEP 27 1996

AUSTIN, TEXAS

OPERATOR'S CERTIFICATION

I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this report, that this report was prepared by me or under my supervision and direction, and that data and facts stated therein are true, correct, and complete, to the best of my knowledge.

Barrett L. Smith

Senior Operations Engineer

Typed or printed name of operator's representative

Title of Person

(915) 682-6822

8 / 21 / 96

Signature

Telephone Area Code Number

Date: mo.

day year

Signature

Return to
Records
Retention

MAPPING 143

495-32488

SECTION II DATA ON WELL COMPLETION AND LOG (Not Required on Retest)

24. Type of Completion: New Well Deepening Plug Back Other 25. Permit for Plug Back or Deepen *22 1006 TE* * PERMIT NO. *8-23-96 451834*

26. Notice of Intention to Drill this well was filed in Name of _____ Rule 37 Exception _____ CASE NO. _____

27. Number of producing wells on this lease in this field (reservoir) including this well *1st Well* 28. Total number of acres in this lease *640* 29. Date Plug Back, Deepening, WorkOver or Drilling Operations: Commenced *7/17/96* Completed *8/3/96* 30. Distance to nearest well, Same Lease & Reservoir *1st well*

31. Location of well, relative to nearest lease boundaries of lease on which this well is located *1320 Feet From North Line and 1320 Feet from West Line of the University 20-12 Lease*

32. Elevation (DF, RKB, RT, GR, ETC.) _____ 33. Was directional survey made other than inclination (Form W-12)? Yes No

34. Top of Pay _____ 35. Total Depth *12,002'* 36. P. B. Depth *11,500'* 37. Surface Casing Determined by: Field Rules Recommendation of T.D.W.R. Railroad Commission (Special) Dt. of Letter _____

38. Is well multiple completion? 39. If multiple completion, list all reservoir names (completions in this well) and Oil Lease or Gas ID No. *FIELD & RESERVOIR* GAS ID or OIL LEASE # *34773* Oil-O Gas-G *0* WELL # *1* 40. Intervals Drilled by: _____ Rotary Tools _____ Cable Tools _____ 41. Name of Drilling Contractor *RMC* *Block 20 Wolfcamp* *Block 20 Bone Springs* 42. Is Cementing Affidavit Attached? Yes No

43. CASING RECORD (Report All Strings Set in Well)

CASING SIZE	WT #/FT.	DEPTH SET	MULTISTAGE TOOL DEPTH	TYPE & AMOUNT CEMENT (sacks)	HOLE SIZE	TOP OF CEMENT	SLURRY VOL. cu. ft.

44. LINER RECORD

Size	TOP	Bottom	Sacks Cement	Screen

45. TUBING RECORD

Size	Depth Set	Packer Set	From	To
			10,310'	10,354'

46. Producing Interval (this completion) Indicate depth of perforation or open hole

From	To
10,310'	10,354'

47. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

Depth Interval	Amount and Kind of Material Used
10,310'-10,354'	Acidz w/ 4300 gals 15% HCl. Frac w/ 53,000# 20/40 sand.
11,700'-11,806'	Acidz w/ 2000 gals 15% HCl. Frac w/ 152,000# 20/40 sand.

48. FORMATION RECORD (LIST DEPTHS OF PRINCIPAL GEOLOGICAL MARKERS AND FORMATION TOPS)

Formations	Depth	Formations	Depth

REMARKS *Plugged back from Wolfcamp zone 11,700'-11,806' by setting RBP @ 11,500' & perforating the Bone Spring 10,310'-10,354' Lower sandstone Mt*
**Please leave permit open for future down hole cementing*

POGO UNIVERSITY 20-12 #1
1320' FNL & 1320' FWL
Section 12, Block 20, ULS
Winkler County, Texas
API #: 42-495-32488
Pogo WI: 43.75%

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KB: 3477' KB
PTD: 8150'

P: 2BS 10310-10354' ^{scsd}
P: 3BS 11700-11806'

STIMULATE 2BS PERFS
AFE Gross \$91,200

5/07/97 28 BO, 17 BW, 55 mcf
5/08/97 28 BO, 15 BW, 55 mcf
5/09/97 43 BO, 47 BW, 55 mcf

5/10/97 TD 12002' BP 11512' P:3BS,2BS. PO: Work overshot free.

Clean out sand - start swab. SICP - 700# - T.P. = 70#. Fluid @ surf on csg. Pump 180 bbls 10# brine D.C. NDTREE - NUBOP. Tbg stuck. Slight movement, lay down 1 jt 2 1/4 tbg. Stuck @ 11,440'. Work free. TOH w/60 jts to 9600'. SION.

Daily Cost: \$2,230

Cum Cost: \$53,552

5/11/97 TD 12002' BP 11512' P:3BS,2BS. PO: Retrieve pkr.

Finish TOH w/tbg & 4 1/2" cut lip guide. Scale on bottom 6 jts tbg. TIH w/ret head - bumper sub - jars - 4 x 3 1/2 D.C.'s - 2 1/4 tbg to 11,470'. Latch onto pkr. Release & jar pkr loose. TOH to 9600'. SION.

Daily Cost: \$3,430

Cum Cost: \$56,982

5/12/97 TD 12002' BP 11512' P:3BS,2BS. PO: Put well on production.

Finish TOH. Lay down D.C.'s & jars. REcover Uni VI w/plug & drag spring. SION.

Daily Cost: \$750

Cum Cost: \$57,732

5/13/97 TD 12002' CIBP 10550' P:3BS,2BS. PO: Sqz perfs 10310-10354'.

SICP 500 PSI. Set 5 1/2" CIBP @ 10550', set RBP. Est inj rate 1400 PSI @ 2 BPM. TOH tbg. SDFN.

Daily Cost: \$2,970

Cum Cost: \$60,702

5/14/97 TD 12002' CIBP 10550' P:3BS,2BS. PO: Prep to sqz perfs.

SICP 900 PSI. Test tbg to 5000 PSI. SDFN.

Daily Cost: \$904

Cum Cost: \$61,606

5/15/97 TD 12002' CIBP 10550' P:3BS. PO: TOH w/ pkr.

SICP 0, SITP 0. Open bypass on pkr @ 10100', sqz perfs 10310-10354'; min 650 PSI, max 2500 PSI; ISIP 2000 PSI. SDFN.

Daily Cost: \$7,050

Cum Cost: \$68,656

5/16/97 TD 12002' CIBP 10550' P:3BS. PO: Drlg cmt.

SITP sl vac, SICP 0. Tag cmt @ 10150', drl to 10280', cmt soft. SDFN.

Daily Cost: \$3,410

Cum Cost: \$72,066

5/17/97 TD 12002' P:3BS*. PO: RIH pump & rods.

Dr1 cmt 10280-10370', test perfs 11700-11806' to 1500 PSI. Dr1 CIBP @ 10550', tag sd 11810'.

Daily Cost: \$2,400

Cum Cost: \$74,466

JUN 5 1997

LANDS

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POGO UNIVERSITY 20-12 #1
 1320' FNL & 1320' FWL
 Section 12, Block 20, ULS
 Winkler County, Texas
 API #: 42-495-32488
 Pogo WI: 43.75%

KB: 3477' KB
 PTD: 8150'

P: 2BS 10310-10354' ^{sqrd}
 P: 3BS 11700-11806'

STIMULATE 2BS PERFS
 AFE Gross \$91,200

5/07/97 28 BO, 17 BW, 55 mcf
 5/08/97 28 BO, 15 BW, 55 mcf
 5/09/97 43 BO, 47 BW, 55 mcf

5/18/97 TD 12002' PBD 11810' P:3BS*. PO: Hang well on.
 Wash sd 11810-11933' PBD. TIH prod tbg Assy, EOT 11620'. RIH pump &
 rods.
 Daily Cost: \$2,580 Cum Cost: \$77,046

5/19/97 TD 12002' PBD 11810' P:3BS*. PO: Well on production.
 Finish RIH rods. Well on production 1700 hrs 5/18/97; short 310 BLW.
 Daily Cost: \$4,930 Cum Cost: \$81,976

5/20/97 TD 12002' PBD 11810' P:3BS*. 14½ hrs - Pmpd 0 BO, 149 BW, 0 mcf.
 5/21/97 TD 12002' PBD 11810' P:3BS*. 24 hrs - Pmpd 11 BO, 60 BW, 90 mcf.
 5/22/97 TD 12002' PBD 11810' P:3BS*. 24 hrs - Pmpd 66 BO, 74 BW, 115 mcf.
 5/23/97 TD 12002' PBD 11810' P:3BS*. 24 hrs - Pmpd 83 BO, 64 BW, 115 mcf.
 5/24/97 TD 12002' PBD 11810' P:3BS*. 24 hrs - Pmpd 93 BO, 74 BW, 115 mcf.
 5/24/97 TD 12002' PBD 11810' P:3BS*. 24 hrs - Pmpd 94 BO, 76 BW, 115 mcf.
 5/24/97 TD 12002' PBD 11810' P:3BS*. 24 hrs - Pmpd 94 BO, 62 BW, 115 mcf.
 5/24/97 TD 12002' PBD 11810' P:3BS*. 24 hrs - Pmpd 94 BO, 73 BW, 115 mcf.
 5/28/97 TD 12002' PBD 11810' P:3BS*. 24 hrs - Pmpd 100 BO, 86 BW, 115 mcf.
 5/29/97 TD 12002' PBD 11810' P:3BS*. 24 hrs - Pmpd 91 BO, 80 BW, 115 mcf.
 5/30/97 TD 12002' PBD 11810' P:3BS*. 24 hrs - Pmpd 88 BO, 76 BW, 115 mcf.

FINAL REPORT.



LOGO
DAILY DRILLING REPORT

Daily
Report

WELL UNIVERSITY 20-12-1 DATE 5-14-97

TD 12,002' PBD 10,550' DRLG. HRS. FOOTAGE FORMATION

BIT NO. SIZE MAKE/TYPE DEPTH IN DEPTH OUT

FTG HRS WOB RPM JETS GRADE T B
PERFS: 10,310'-10,354', (CIBP@10,550') 11,700'-11,806'

BIT NO. SIZE MAKE/TYPE DEPTH IN DEPTH OUT

FTG HRS WOB RPM JETS GRADE T B

PUMP SIZE SPM PRESSURE

DEFLECTION SURVEY AT

MUD WT VIS W.L. FC PH CL

SOLIDS OIL

LAST CSG STRING: SIZE SEAT HOLE SIZE

DAILY COST - WELL \$ 904.⁰⁰ CUMULATIVE COST - WELL \$ 10,284.⁰⁰

MUD \$

PRESENT OPERATIONS

SQUEEZE PERFS 10,310'-10,354' $\frac{1}{100}$ 2X 'H'

REMARKS SICP: 900[#]

TIH $\frac{1}{5}$ " HDCH $\frac{1}{2}$ " SW-327 JTS 2 $\frac{1}{2}$ " TAB To

10,100'. DROP STANDING UNLUE. TEST TAB 5000[#]. (PKR SET)

FISH STANDING UNLUE.

510W.

Pool WSU: 650.⁰⁰

WTR: 120.⁰⁰

SUPV: 134.⁰⁰

= 904.⁰⁰

DRILLING DAYS DT

COMPLETION DAYS



Pogo Logging
DAILY DRILLING REPORT

WELL UNIVERSITY 20-12-1 DATE 5-14-97

TD 12,002' PBD 10,550' DRLG. HRS. _____ FOOTAGE _____ FORMATION _____

BIT NO. _____ SIZE _____ MAKE/TYPE _____ DEPTH IN _____ DEPTH OUT _____
FTG _____ HRS _____ WOB _____ RPM _____ JETS _____ GRADE T _____ B _____

PERFS: 10,310'-10,354' (CIBP@10,550') 11,700'-11,806'
BIT NO. _____ SIZE _____ MAKE/TYPE _____ DEPTH IN _____ DEPTH OUT _____

FTG _____ HRS _____ WOB _____ RPM _____ JETS _____ GRADE T _____ B _____

PUMP SIZE _____ SPM _____ PRESSURE _____

DEFLECTION SURVEY AT _____

MUD WT. _____ VIS _____ W.L. _____ FC _____ PH _____ CL _____

SOLIDS _____ OIL _____

LAST CSG STRING: SIZE _____ SEAT _____ HOLE SIZE _____

DAILY COST - WELL \$ 904.⁰⁰ CUMULATIVE COST - WELL \$ 10,284.⁰⁰
MUD \$ _____

PRESENT OPERATIONS _____

SQUEEZE PERFS 10,310'-10,354' 7/100 2X 'H'

REMARKS

SICP: 900"

TIH 7/5 1/2" HDCH 7/2 7/8 SW-327 JTS 2 7/8 TBL To

10,100'. DROP STANDING VALVE - TEST TAB 5000". (PKR SET)

FISH STANDING VALVE.

510 W.

Pool WSV: 650.⁰⁰

WTR: 120.⁰⁰

SUPV: 134.⁰⁰

= 904.⁰⁰

DRILLING DAYS D.T.

COMPLETION DAYS _____



DAILY DRILLING REPORT

WELL UNIVERSITY 20-12-1

DATE 5-15-97

TD 12,002' PBD 10,550' DRLG. HRS. FOOTAGE

FORMATION

BIT NO. SIZE MAKE/TYPE DEPTH IN DEPTH OUT

FTG HRS WOB RPM JETS GRADE T B

PERFS: 10,310'-10,354' (CIPP @ 10,550') 11,700'-11,806'

BIT NO. SIZE MAKE/TYPE DEPTH IN DEPTH OUT

FTG HRS WOB RPM JETS GRADE T B

PUMP SIZE SPM PRESSURE

DEFLECTION SURVEY AT

MUD WT VIS W.L. FC PH CL

SOLIDS OIL

LAST CSG STRING: SIZE SEAT HOLE SIZE

DAILY COST - WELL \$ 7050.⁰⁰ CUMULATIVE COST - WELL \$ 17,334.⁰⁰

MUD \$

MUD \$

PRESENT OPERATIONS

TOH w/ PRR.

REMARKS

SICP: Ø SITP: Ø

RU 'B.J', PNR BYPASS OPEN @ 10,100'

LEAD w/ 15 BBL FW - 100 sy 'H' @ 15.6 PP6 → 1.18 @ 2.5 BPM

(CLOSE BYPASS @ 56 BBL →). FLUSH w/ 5 BBL FW

55.5 BBL 10# BRINE. MW 650# - MAX 2500#

15IP: 2000#

SLOW.

Pool Wsu: 550.⁰⁰

CMT : 4800.⁰⁰

WTR : 650.⁰⁰

PRR : 850.⁰⁰

SUPV : 200.⁰⁰

= 7050.⁰⁰

DRILLING DAYS D.T.

COMPLETION DAYS

DAILY DRILLING REPORT

WELL UNIVERSITY 20-12-1 DATE 5-16-97

TD 12,002 FBTD 10,650 DRLG. HRS. _____ FOOTAGE _____ FORMATION _____

BIT NO. _____ SIZE _____ MAKE/TYPE _____ DEPTH IN _____ DEPTH OUT _____

FTG _____ HRS _____ WOB _____ RPM _____ JETS _____ GRADE T B _____

PERFS: 10,310'-10,354' (CIBP @ 10,650') 11,700'-11,806'

BIT NO. _____ SIZE _____ MAKE/TYPE _____ DEPTH IN _____ DEPTH OUT _____

FTG _____ HRS _____ WOB _____ RPM _____ JETS _____ GRADE T B _____

PUMP SIZE _____ BPM _____ PRESSURE _____

DEFLECTION SURVEY AT _____

MUD WT _____ VIS _____ W. L. _____ FC _____ PH _____ CL _____

SOLIDS _____ OIL _____

LAST CSG STRING: SIZE _____ SEAT _____ HOLE SIZE _____

DAILY COST - WELL \$ 3410.⁰⁰ CUMULATIVE COST - WELL \$ 20,744.⁰⁰

MUD \$ _____ MUD \$ _____

PRESENT OPERATIONS

CONT' DRILL CMT.

REMARKS

SITP = SLIGHT VAC - SICP = 0

LOAD TOG 7 1/10 321-1000#. RELEASE PNR + TOH.

TIH 4 1/2" BIT - 6 x 3 1/2 D.C.'S. 2 7/8 TOG TO 10,150'

THG TOG @ 10,150'. DRILL TO 10,280'. CMT 50 FT.

SLOW.

POOL WSU: 1430.⁰⁰

WTR: 1180.⁰⁰

BIT: 400.⁰⁰

RUSE UNIT: 1200.⁰⁰

SUPV: 200.⁰⁰

= 3410.⁰⁰

DRILLING DAYS D.T. COMPLETION DAYS _____

DAILY DRILLING REPORT



WELL UNIVERSITY 20-12-1 DATE 5-17-97

TD 12,002' PBTD DRLG. HRS. FOOTAGE FORMATION

BIT NO. SIZE MAKE/TYPE DEPTH IN DEPTH OUT

FTG HRS WOB RPM JETS GRADE T B

PERFS: (10,310'-10,354' SQUEEZED) 11,700'-11,806' DEPTH IN DEPTH OUT

BIT NO. SIZE MAKE/TYPE DEPTH IN DEPTH OUT

FTG HRS WOB RPM JETS GRADE T B

PUMP SIZE SPM PRESSURE

DEFLECTION SURVEY AT

MUD WT VIS W.L. FC PH CL

SOLIDS OIL

LAST CSG STRING: SIZE SEAT HOLE SIZE

DAILY COST - WELL \$ 2400.⁰⁰ CUMULATIVE COST - WELL \$ 23,144.⁰⁰

MUD \$ MUD \$

PRESENT OPERATIONS

REMARKS

DRILL CMT #/ 10,280' TO 10,370'. TEST PERFS
1500#. DRILL CIBP @ 10,550'. CONTINUE IN HOLE
CHECK PBTD @ 11,810'

310W.

Pool wsv: 1550.⁰⁰
RUSE wsv: 650.⁰⁰
SUPV : 200.⁰⁰
= 2400.⁰⁰

DRILLING DAYS D.T. COMPLETION DAYS

GROUNDWATER PROTECTION DETERMINATION

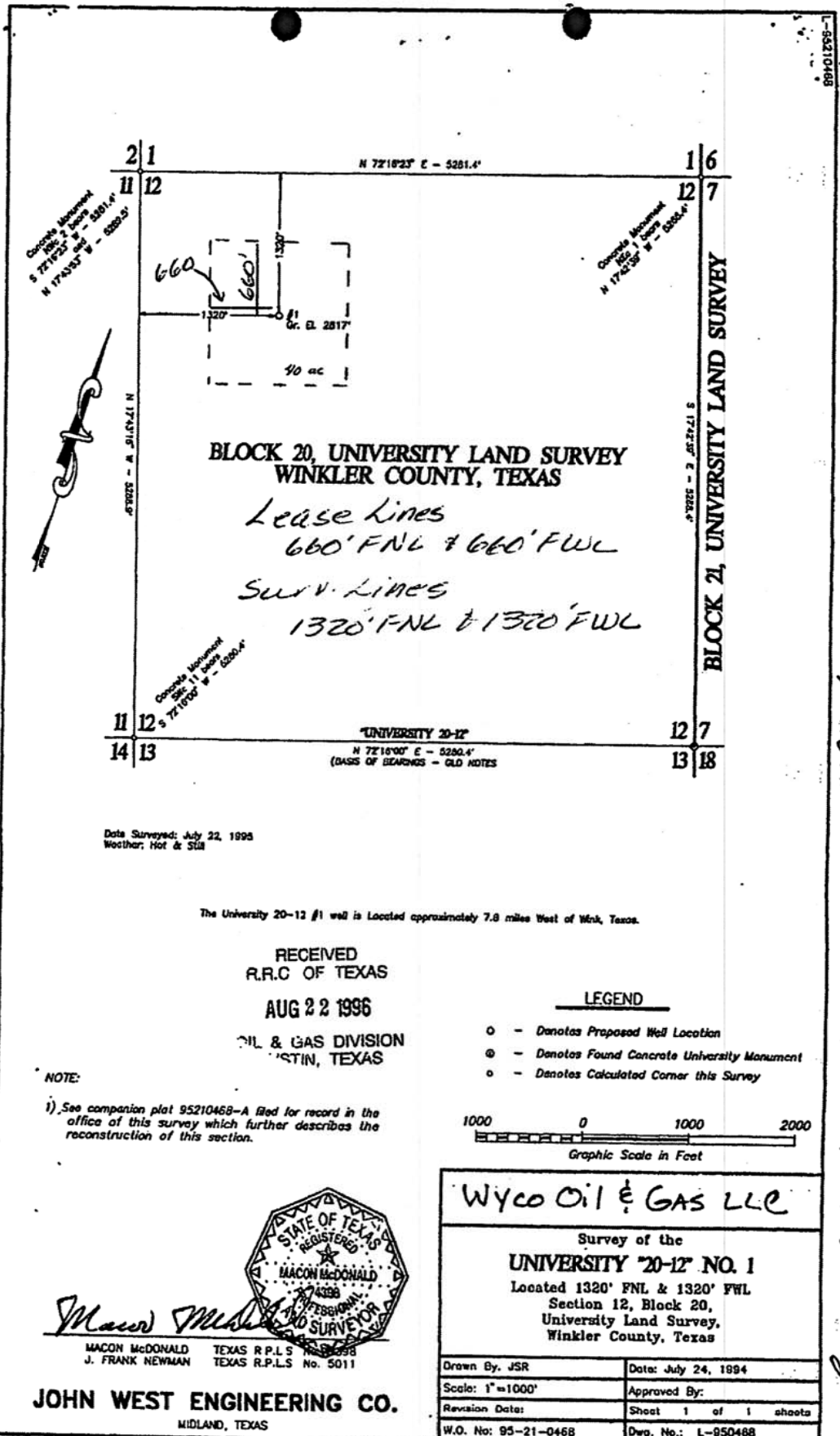
Form GW-2



Groundwater Advisory Unit

Date Issued:	16 December 2016	GAU Number:	164712
Attention:	WYCO OIL & GAS LLC PO BOX 12367 ODESSA, TX 79768	API Number:	49532488
Operator No.:	945368	County:	WINKLER
		Lease Name:	University 20-12
		Lease Number:	34773
		Well Number:	1
		Total Vertical Depth:	13500
		Latitude:	31.741212
		Longitude:	-103.292515
		Datum:	NAD27
Purpose:	Recompletion (RC)		
Location:	Survey-UL; Abstract-U13; Block-20; Section-12		
To protect usable-quality groundwater at this location, the Groundwater Advisory Unit of the Railroad Commission of Texas recommends:			
The base of usable-quality water-bearing strata is estimated to occur at a depth of 325 feet at the site of the referenced well.			
This recommendation is applicable to all wells within a radius of 200 feet of this location.			
Note: Unless stated otherwise, this recommendation is intended to apply only to the subject well and not for area-wide use. This recommendation is for normal drilling, production, and plugging operations only. It does not apply to saltwater disposal operation into a nonproductive zone (RRC Form W-14).			
This determination is based on information provided when the application was submitted on 12/16/2016. If the location information has changed, you must contact the Groundwater Advisory Unit, and submit a new application if necessary. If you have questions, please contact us at 512-463-2741 or gau@rrc.texas.gov.			
Groundwater Advisory Unit, Oil and Gas Division			
Form GW-2 Rev. 02/2014	P.O. Box 12967 Austin, Texas 78771-2967	512-463-2741	Internet address: www.rrc.texas.gov

L-95210468



Date Surveyed: July 22, 1994
Weather: Hot & Still

The University 20-12 #1 well is Located approximately 7.8 miles West of Wink, Texas.

RECEIVED
R.R.C OF TEXAS
AUG 22 1996
OIL & GAS DIVISION
DALLAS, TEXAS

NOTE:
1) See companion plat 95210468-A filed for record in the office of this survey which further describes the reconstruction of this section.

*This plat is true & correct to the best of my knowledge.
Susan Perkins 12/16/16*

*COORDINATES! LAT: 31.741212
NAD 27 Long: -103.292515*