

DRAWER DD

Artesia, NM 88210

SUBMIT IN TRIPLICATE

Form approved.
Budget Bureau No. 42-R1425.

DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

AUG 23 1982

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒DEEPEN ☐ART PLUG BACK ☐

b. TYPE OF WELL

OIL WELL ☐GAS WELL ☒OTHER ☐SINGLE ZONE ☒MULTIPLE ZONE ☐

2. NAME OF OPERATOR

Pogo Producing Company

3. ADDRESS OF OPERATOR

P.O. Box 10340 Midland, Texas 79702

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*

At surface

1980' FNL 1980' FEL

At proposed prod. zone

1980' FNL 1980' FEL

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

28 Miles East of Carlsbad, New Mexico

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drlg. unit line, if any)

1980'

16. NO. OF ACRES IN LEASE

1767.58

18. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

3800'

19. PROPOSED DEPTH

15,000'

17. NO. OF ACRES ASSIGNED
TO THIS WELL

320

20. ROTARY OR CABLE TOOLS

Rotary

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

3620.7' GR

22. APPROX. DATE WORK WILL START*

September 1, 1982

23.

PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2	13 3/8	54.50	740'	750 sx circulate
12 1/4	10 3/4	40.5 & 45.5	4560'	1400 sx circulate
9 1/2	7 5/8	26.40 & 29.70	11700'	800 sx
6 1/2	5	18	15000'	500 sx

Proposal is to drill a well to adequately test the Morrow formation. Cement will be circulated to surface on the 13 3/8" & 10 3/4" casing strings.

Completion or abandonment will be performed in accordance with prudent practices and regulatory requirements.

Mud Program: Spud mud to 740', brine to 4560', cut-brine to Wolfcamp with KCL-Polymer to total depth.

BOP Program: From 500' to 4560'-12" GK Hydrill 900 series, from 4560' to 15,000' - 10" Cameron QRC 1500 series.

Natural gas on this lease is not dedicated.

RECEIVED

AUG 13 1982

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.

MINERALS POLY. SERVICE

ROSWELL, NEW MEXICO

SIGNED

[Signature]

TITLE

Division Operations Manager

DATE

8/10/82

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

8-20-82

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions On Reverse Side

Filed
10-1
AUG 11 1982
4/24/82

A well location record is to be filed in the well location record of the State of New Mexico.

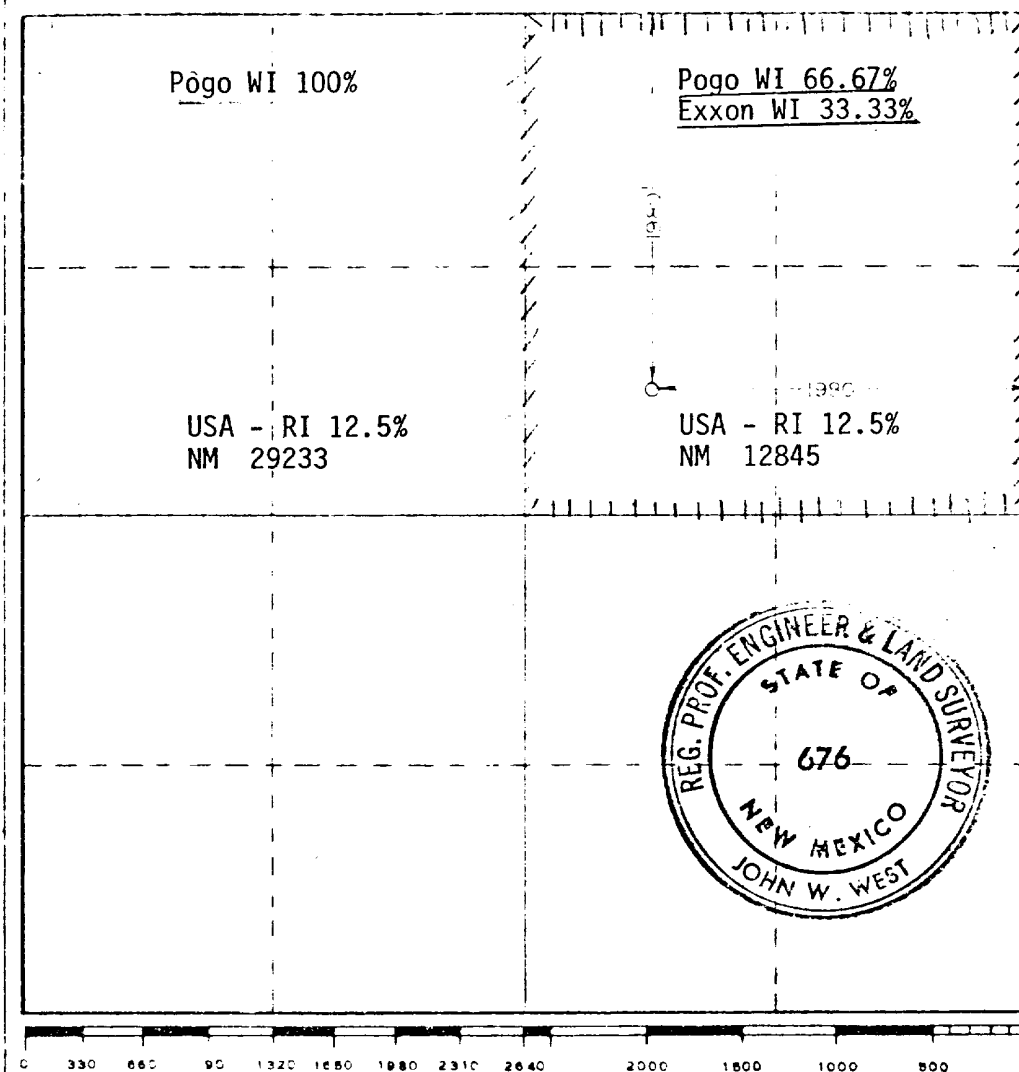
Pogo Producing Co.		SCI Federal		2
G	12	22 South	31 East	Eddy
1980	North	1980	East	
3620.7	Morrow	Wildcat	<i>Marlow</i>	320

- Outline the acreage dedicated to the subject well by colored pencil or ballpoint pen in the plot below.
- If more than one lease is dedicated to the well, outline each and identify the ownership, interest, and working interest and royalty.
- If more than one lease at different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☒ No If answer is "yes" type of consolidation Communitization is being prepared

If answer is "no" list the owners and tract descriptions which have actually been consolidated on reverse side of this form if necessary.

No allowable will be assigned to the well until all interests have been consolidated by communitization, unitization, force-pooling, or otherwise, or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

B.J. Williams
Name
B.J. Williams
Position
Division Operations Manager
Company
Pogo Producing Company
Date
August 10, 1982

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed
7-12-82
Registered Professional Engineer
and/or Professional Surveyor
John W. West
Certificate No. JOHN W. WEST 878
PATRICK A. ROMERO 6868
Ronald J. Eidson 3239

APPLICATION FOR DRILLING

Pogo Producing Company

SCL Federal No. 2

Eddy County, New Mexico

In conjunction with permitting the captioned well for drilling in Section 12, T-22-S, R-31-E, Eddy County, New Mexico, Pogo Producing Company submits the following information in accordance with U.S.G.S. (NTL-6) letter dated July 1, 1976.

1. The surface formation in Quaternary sand and gravel.

2. Estimated tops of geologic markers as follows:

Rustler Anhydrite	730'	Wolfcamp	11,695'
Salado Salt	950'	Strawn Limestone	13,030'
Castile Anhydrite	2910'	Atoka	13,225'
Delaware Lime	4555'	Morrow Lime	13,850'
Delaware Sand	4627'	Barnett	14,900'
Bone Springs	8440'		

3. The depths at which oil, gas or water is expected are: 5665', 11,335', 11,695', 13,030', 13,560', 14,190'.

4. Casing Program and Cement:

Surface: 13 3/8" 54.50# K-55 ST&C @ 740' with 750 sxs Cl C with 2% CaCl₂ + 1/4# Flocele per sx. Circulate cement.

Intermediate: 10 3/4" 40.50# & 45.50# K-55 & S-80 ST&C with 1100 sxs Lt with 1/4# Flocele, 5# Gilsomite & 15# salt per sx plus 300 sxs Cl C w/3# salt per sx. Circulate cement.

Intermediate: 7 5/8" 26.40# & 29.70# N-80 S-95 with 800 sxs Cl H 50-50 POZ with additives, top of cement to cover any productive zones.

Production: 5" N-80 with 500 sxs Cl H with additives.

5. Blowout Preventers: From 500' to 4560' - 12" GK Hydrill 900 series. From 4560' to 15,000' - 10" Cameron QRC 1500 series. (The kill line and choke manifold are described on attached sketch) BOE will be tested daily and entered on daily drilling log.

6. Circulating Medium: Steel and earthen pits will be used to hold drilling fluids and cuttings. The drilling mud program is as follows: spud mud to 740', brine to 4560', drill out under 10 3/4" with cut-brine to top of Wolfcamp (9.2 - 9.8 ppg), KCL-Polymer brine to total depth.

7. The rig will be equipped with safety devices such as Kelly cock, drill pipe float, full opening stabbing valve and inside BOP, operational test will be performed periodically and results noted on tour sheets.

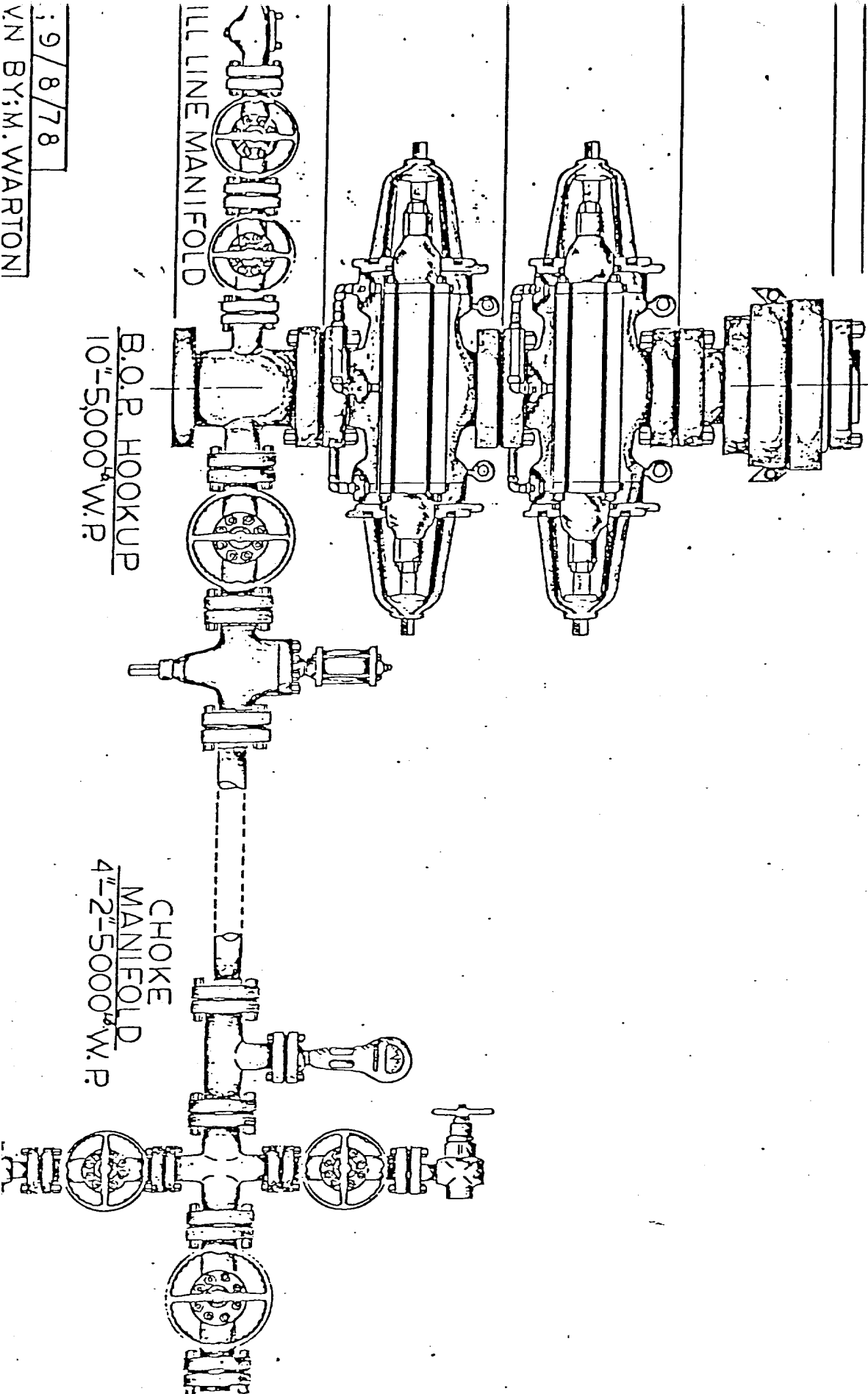
8. Drill stem tests are possible for the Cherry Canyon, Bone Springs, Wolfcamp Strawn, Atoka, and Morrow zones.

9. Ten foot samples of cuttings will be caught from the base of the surface pipe 740' to total depth. A mud logging unit is planned from the base of the first intermediate to total depth.
10. Adequate electrical and resistivity logs will be run from total depth to the base of the intermediate at 4560', the Gamma Ray will be run to the surface.
11. A strong water flow may be encountered from 2700' to 3300'. Adequate equipment will be in service to contain the water flow so as to pose no drilling hazard. No abnormal temperature or additional hazards are expected to be encountered.
12. The anticipated starting date is September 1, 1982 with the completion expected by December 15, 1982.

WARTON DRILLING CO.

B.O.P. ARRANGEMENT RIG NO. 6

- 1-G.K. HYDRILL 12"-900 SERIES; 3000 LBS. W.P.
- 1 QRC CAMERON 10"-1500 SERIES; 5000 LBS. W.P.; DOUBLE B.O.P.
- CHOKE MANIFOLD 4 1/2"-15000 SERIES; 5000 LBS. W.P.; W/CAMERON HYDR. VALVE
- 1-POSITIVE; 1-ADJUSTABLE CHOKE
- 1-KOOMER ACCUMULATOR; 7 STATION W/REMOTE CONTROL STAND; 3000 LBS. P.S.I.
- 1-12"-900 SERIES; 3000 LBS. P.S.I.; DOUBLE SHAFFER B.O.P.; TO BE USED FOR DRILLING INTERMEDIATE HOLE.



ILL LINE MANIFOLD

B.O.P. HOOKUP

10"-5000⁴ W.P.

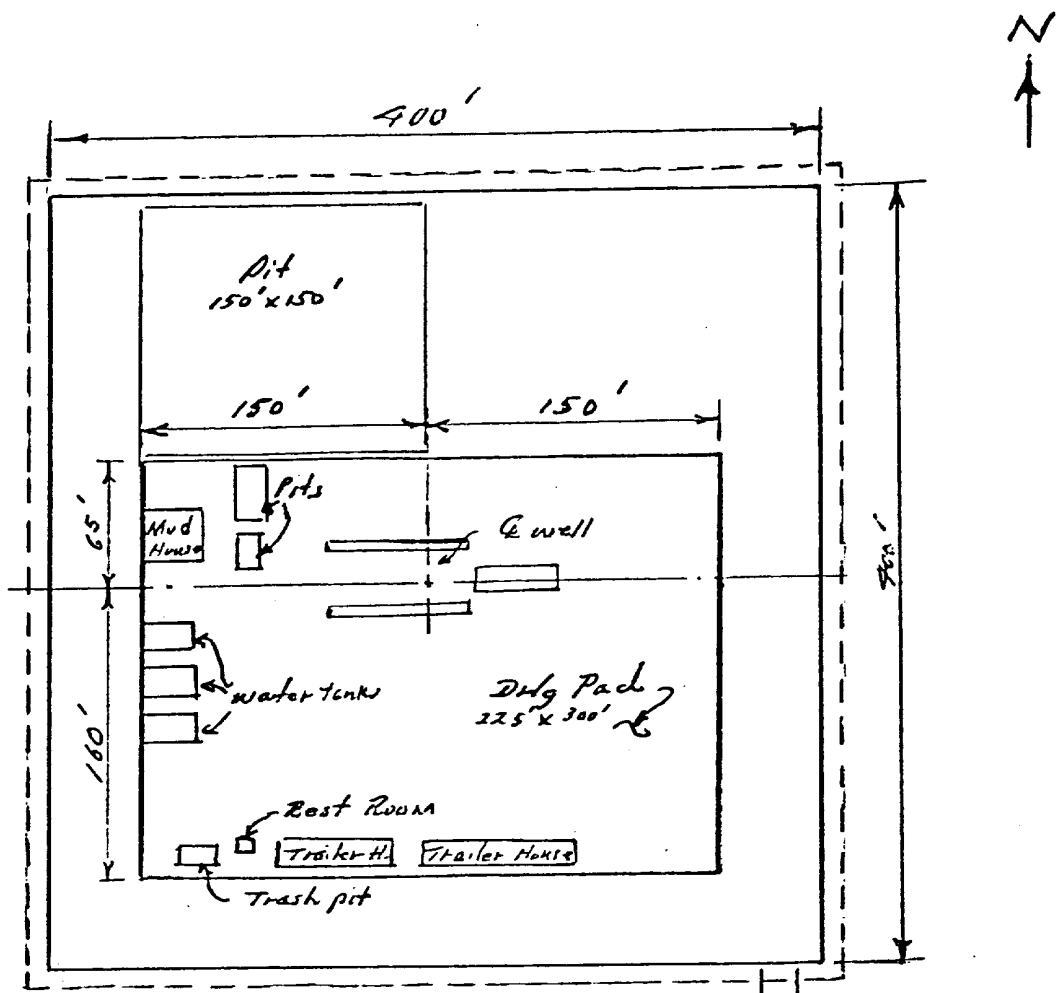
CHOKE

MANIFOLD

4 1/2"-2-5000⁴ W.P.

9/8/78

VN BY:M.WARTON



Additional 20' strip surrounding 400' x 400'
Location cleared by Archaeologist.

12' Access Road

Exhibit C

Pogo Producing Co.
SCL Federal No. 2
1980' FNL, 1980' FEL
Sec. 12, T-22-S, R-31-E
Eddy County, New Mexico

505 Marquette NW
Suite 815
Albuquerque, New Mexico 87125

20 AUG 1982

Pogo Producing Company
P. O. Box 10340
Midland, Texas 79702

Dear Sir:

Your application for Permit to Drill well No. 2 SCL Federal in the SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 12, T. 22S., R. 31E., Eddy County, New Mexico, lease NM-12845, to a depth of 15,000 feet to test the Morrow formation in the oil-potash area, is hereby approved as amended by stipulations attached to the application.

One copy of the application is returned herewith. Please notify the District Supervisor, Minerals Management Service, Roswell, New Mexico, in sufficient time for a representative to witness all cementing operations.

Sincerely yours,

(ORIG. SSG.) HENRY H. LUCCOCK, JR.

FOR Gene F. Daniel
Deputy Minerals Manager
Oil and Gas

Enclosure

cc:

✓NMOCD (2)
BLM - Carlsbad
MM, SCR
DMM - Mining (2)
Regional Files
Roswell District Files
Artesia Sub-District
Suspense File
ARF
RCF

JAGillham/ml1/8-18-82



Pogo Producing Company

300 Midland Tower Building • Post Office Box 10340 • Midland, Texas 79701 • 915/682-6822

August 16, 1982

District Oil and Gas Engineer
U.S.G.S. Conservation Division
P.O. Drawer 1857
Roswell, New Mexico 88201

Attn: Mr George Stewart

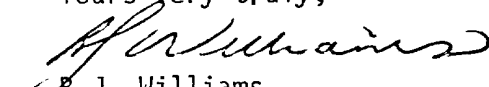
Re: Pogo Producing Company
SCL Federal No. 2
1980' FNL & 1980' FEL
Section 12, T-22-S, R-31-E
Eddy County, New Mexico

Dear Sir:

I have attached a Design Data Sheet for all casing strings for this well.
Please make this a part of my application for drilling.

Thank you for your assistance on this application.

Yours very truly,


B.J. Williams
Division Operations Manager

BJW/slb

Enclosures

RECEIVED

AUG 17 1982

OIL & GAS
MINERALS MGMT. SERVICE
ROSWELL, NEW MEXICO

DESIGN DATA SHEET - CASING

Lse. and Well No.: <u>SCI Federal No. 2</u>	Division : <u>Western</u>	Date Form Prepared: <u>8/16/82</u>
Field : <u>Wildcat</u>	Region : _____	Directional Hole: ☐ Yes, ☒ No
State : <u>New Mexico</u>	Proposed T.D.: _____	Max. Degrees off Vertical: _____

DESIGN CONDITIONS	(1)	(2)	(3)	(4)	RECEIVED			
Surf., Int., Prod., Etc.	Surf.	Int.	Int.	Prod.				
Csg. O.D., In.	13 3/8	10 3/4	7 5/8	5				
Depth, ft.	740	4560	11,700	14,600	AUG 21 1982			
Bit Size, In.	17 1/2	12 1/4	9 1/2	6 1/2				
Mud Wt., #/gal.	9.1	9.625	9.4	12.2	O. C. D.			
Burst. Press., psi	350	2280	5713	9244	ARTESIA, OFFICE			
Min. Collapse D.F.	1.125	1.125	1.125	1.125				
Min. Tension D.F.	1.800	1.800	1.800	1.800				
Min. Burst D.F.	1.000	1.000	1.000	1.000				
Buoyancy Considered	No	No	No	No				
Bending, °/100'								
From, Ft.								
To, Ft.								
Wear or Corr., Allow., In.	No	No	No	No				

CLEARANCE									
Cplg. to Csg. Above, In.	---	0.865	1.450	0.825					
Cplg. to Hole, In.	3.125	0.500	1.000	0.450					
Bit to Csg., In.	0.365	0.450	0.375	---					

RECOMMENDED CASING STRINGS (CUM)										Actual Design Factors (D.F.)			Mill
Sec- tion	Depth, Ft.		Sec. Wt. M Lbs.	Csg.O.D. In.	Length, Ft.	Weight #/Ft.	Grade Steel	Type Joint		Coll.	Ten.	Burst	Cost, \$
	From	To											
1	0	740	40.3	13 3/8	740	54.50	K-55	ST&C		3.229	13.56	7.8	
2	0	2600	189.5	10 3/4	2600	40.50	K-55	ST&C		1.165	2.375	1.391	
	2600	3600	84.2	10 3/4	1000	40.50	S-80	ST&C		1.145	6.676	1.391	
	3600	4560	43.7	10 3/4	960	45.50	S-80	ST&C		1.373	15.086	1.570	
3	0	1900	319.8	7 5/8	1900	26.40	N-80	BUTT		2.877	2.061	1.054	
	1900	5400	269.6	7 5/8	3500	26.40	N-80	LT&C		1.137	1.817	1.054	
	5400	8400	177.2	7 5/8	3000	26.40	S-95	LT&C		1.130	3.205	1.251	
	8400	11,700	98.0	7 5/8	3300	29.70	S-95	LT&C		1.251	6.805	1.432	
4	11,300	14,600	59.2	5	3300	18	N-80	SFJ		1.134	5.070	1.097	

WELL HEAD RECOMMENDATIONS:

Sweet Gas - 10,000# WP, Dual Master valves.

ACCESSORY RECOMMENDATIONS:

Hi-Lo Shut-in valve

CEMENTING RECOMMENDATIONS:

REMARKS:

RECEIVED

AUG 17 1982

OIL & GAS
MINERALS MGMT. SERVICE
ROSWELL, NEW MEXICO