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NEW MEXICO OIL CONSERVATION COMMISSION

Form C-101
Revised 1-1-65

R E - E N T R Y

5A. Indicate Type of Lease
STATE ☐ FEE ☒

5. State Oil & Gas Lease No.

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

6. Type of Work DRILL ☐ DEEPEN ☐ PLUG BACK ☐		7. Unit Agreement Name
8. Type of Well OIL WELL ☐ GAS WELL ☒ OTHER ☐ SINGLE ZONE ☐ MULTIPLE ZONE ☐		8. Farm or Lease Name Heyco Betenbough
9. Name of Operator Harvey E. Yates Company		9. Well No. 1
10. Address of Operator P. O. Box 1933, Roswell, N. M. 88201		10. Field and Pool, or Wildcat Wildcat (ND)
11. Location of Well UNIT LETTER C LOCATED 660 FEET FROM THE North LINE 1980 FEET FROM THE West LINE OF SEC. 32 TWP. 13S RGE. 36E NMPM		12. County Lea
13. Elevation (show whether DF, KI, etc.) 3975' GR		14. Proposed Depth 13,800'
15. Kind & Status Plug, Bond \$50,000 Blanket		16. Formation Mississippian
17. Drilling Contractor MORANCO		18. Rotary or C.T. RU - 4700' Rotary - TD
21. Approx. Date Work will start 3-14-80		

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
Exist: 17-1/2"	13-3/8"	48#	369	400	
12-1/4"	9-5/8"	40#	4600'	3400	
Will run: 8-3/4"	5-1/2"	17# & 20#	13800'	1400	
					Sufficient to cover 600' above pay

Our proposed re-entry procedure is as follows:

First stage:

1. Prepare road & location pad. Install tubing safety anchors.
2. Clean out old cellar and install new one.
3. Remove DH marker and drill out surface plug w/rat hole machine.
4. NU 13-3/8"OD weld on X 12" - series 900 casing head and NU 12" - 900 X 10" - 900 casing spool. Note: will need short piece of 13-3/8" & 9-5/8" casing to weld onto casing to raise casing spool to surface.
5. NU 10" - 900 BOP w/blind & 2-3/8" pipe rams.
6. RU well service unit.
7. PU 8-3/4" bit, 6 3-1/2"OD drill collars and 2-3/8"OD tubing.
8. Close pipe rams & test 9-5/8" casing, casing spool & BOP to 1500 psi - 30 min.

(OVER)

IF ABOVE SPACE DESCRIBE PROPOSED PROGRAM: IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTION ZONE. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

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

Signed Jack Yates Title Vice President Date 2-22-80

(This space for State Use)

APPROVED BY [Signature] TITLE SUPERVISOR DISTRICT 11 DATE FEB 28 1980

CONDITIONS OF APPROVAL, IF ANY:

9. Continue TIH to cement plug at 4508'.
10. Reverse circulate mud OOH w/fresh water.
11. Test casing to 1500 psi - 30 min.
12. Drill cement plug and clean out to approximately 4700' to insure no junk is inside 9-5/8" casing.
13. Circulate hole clean. Pull and LD tubing, DC's and bit.
14. Close blind rams and leave BOP installed.
15. Release reverse drilling and rental equipment.
16. Rig down well service unit and move in rotary rig.

Second stage:

1. Dig pits & prepare location for Moranco Rig 7.
2. MI drilling rig and rig up.
3. Remove Davis Tool Co.'s BOP. NU rig BOP & test to 1500 psi.
4. PU 8-3/4" bit, drill collars, 4-1/2" drill pipe and RIH to 6100'.
5. Drill out cement plug at 6100' & circulate hole clean.
6. Drill out cement plug at 8150' & circulate hole clean.
7. Watch for gas pressure from Leonard formation 9746' - 9766'.
8. Clean out to 10900' and circulate gas OOH.
9. Drill out plug at 10900'. Expect salty sulphur water from Cisco-Canyon formation 10971' - 11003'.
10. Clean out to plug at 12200'. Circulate hole clean.
11. Pull DP OOH & rerun in hole open ended to 12200'.
12. Batch mix 170 SX CL H w/5# No 3 sand/Sx and 5/10% CFR-2 to 17-1/2#/gal slurry and spot 300' plug at 12200'.
13. WOC - 24 hours. GIH w/mill tooth bit & dress off top of plugs w/10000# wt on bit. If rate of penetration is 1-2 min/ft, plug is firm enough to begin sidetracking old hole.
14. POH & pick up Navi Drill, bent sub, non-magnetic DC, drilling string & TIH.
15. Orient bent sub & non-magnetic drill collar. Build 3-4° angle & 50'. Monitor angle & direction west.
16. POH & LD Navi Drill and bent sub.
17. Run rock bit, BH reamer, non-magnetic drill collar w/baffle plate & BH assembly.
18. Drill 60'. Take single shot picture. Adjust angle and direction as needed.
19. Drill + 300'. POH & LD directional tools.
20. Run rock bit, 2 drill collars, blade stabilizer (pendulum hook-up) to straighten up hole.
21. Drill to 13600' KB. Expect gas in Atoka formation 12285' - 12336' (BHP 3906 psi) and from 12812' - 12890' (BHP 4078 psi).
22. Run electric logs.
23. Run & cement 5-1/2" OD casing (engineered string) on bottom w/1300 SX.
24. Install casing slips and release rotary rig.

This acreage is not dedicated to a pipeline purchaser.

OIL CONSERVATION

FEB 26 '80

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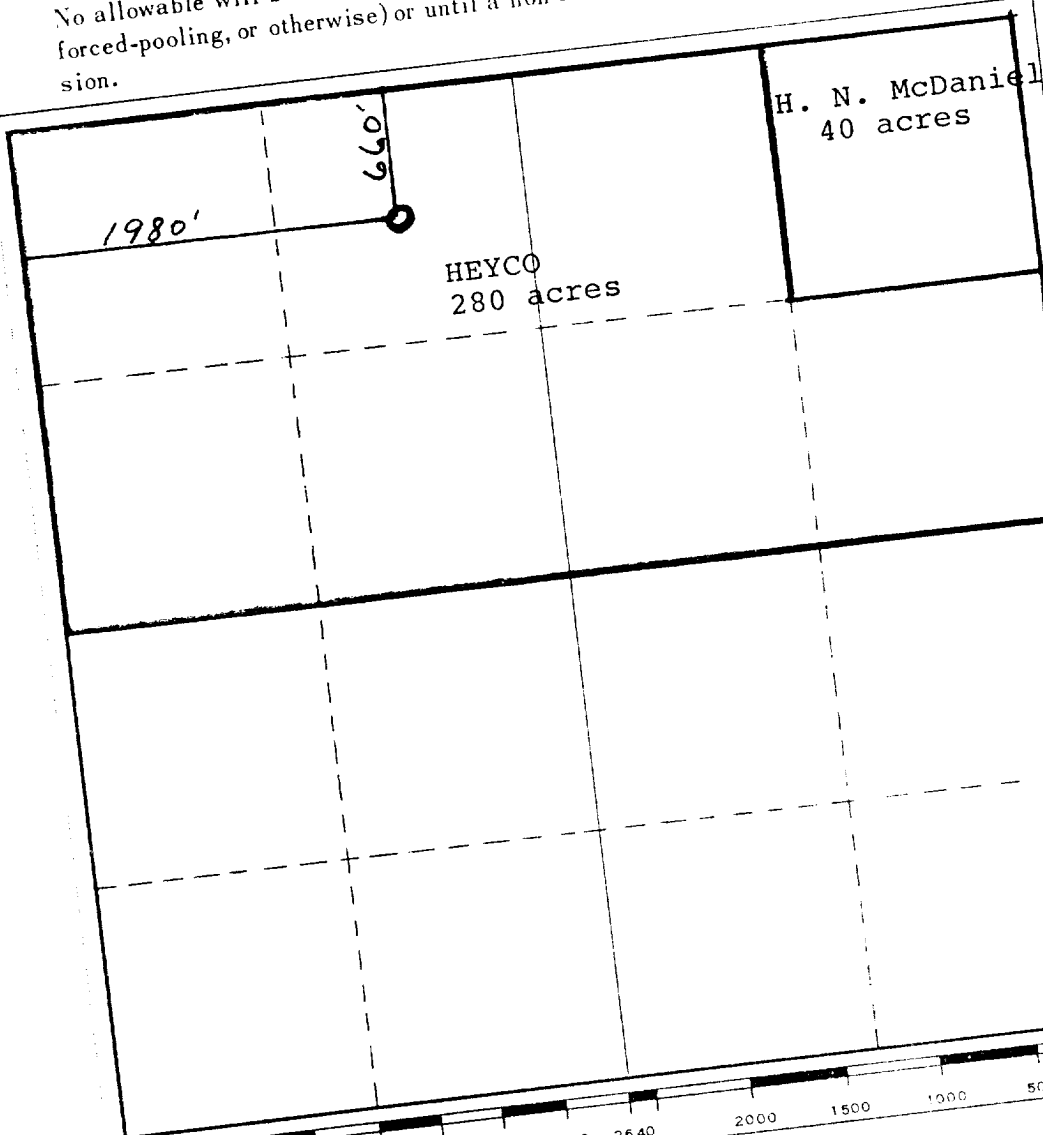
NEW MEXICO OIL CONSERVATION COMMISSION WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

Operator Harvey E. Yates Company		Lease HEYCO Betenbough		Well No. 1
Unit Letter C	Section 32	Township 13S	Range 36E	County Lea
Actual Footage Location of Well: 660 feet from the North line and 1980 feet from the West line		Dedicated Acreage: 320 Acres		
Ground Level Elev. 3975'	Producing Formation Mississippian		Pool Wildcat	

- Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
- If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
- If more than one lease of 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 final state approved unitization is pending.
 If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use 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 best of my knowledge and belief.

Name: Paul G. Yates
 Position: Vice President
 Company: Harvey E. Yates Co
 Date: February 20, 1980

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

Please see original survey
 Date Surveyed: _____
 Registered Professional Engineer and/or Land Surveyor

Certificate No. _____

OIL CONSERVATION DIV.

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DRAWWORKS

Brewster N-75
 Drum: 1¼" Lebus grooved
 Compound: 2-engine oil bath chain drive
 Brake: Hydromatic Parkersburg 40"

ENGINES

Two 610-H.P. D379TA Caterpillar Diesel.

DERRICK

Lee C. Moore, 131', 550,000 lb. nominal capacity.

SUBSTRUCTURE

Lee C. Moore, 14½' high, 550,000 lb. nominal capacity.

MUD PUMPS

Pump No. 1: Emsco DB700. 700 H.P. with steel fluid end. 4¾" - 7¾" liners, 16" stroke. Compound-driven.
 Pump No. 2: NAT C-250, 350 H.P. Powered by D353 Caterpillar Diesel.

DRILL STRING

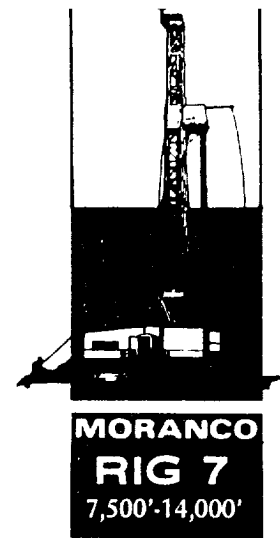
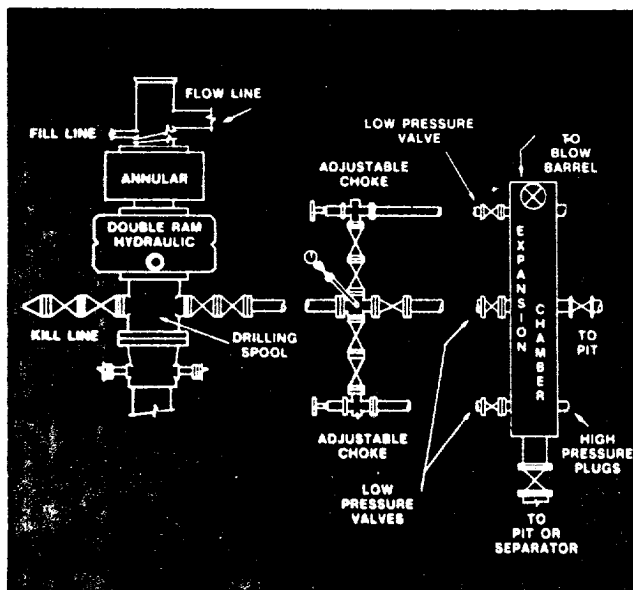
3000' 4½" Grade E, 20 lb.
 Tool Joints: 4½" H-90, 6¼" OD,
 11000' 4½" Grade E, 16.60 lb.
 Tool Joints: 4" H-90, 6" OD
 Thirty Drilco spiral-grooved 6½" OD, 2¼" ID.
 With 4" H-90 Joints.
 Other sized drillpipe & drillcollars available.

BLOWOUT PREVENTERS

One Shaffer LWS hydraulic double 10" x 1500 series. One Hydril 10" x 1500 series.
 Choke manifold 4" x 1500 series flanged connections. Payne 4 valve accumulator closing unit.

MUD SYSTEM

3 - 30 x 7½ x 6 steel pits, with 700 Bbl. capacity. Complete low pressure circulating system, consisting of four submerged mud guns and two counter sunk jets in each pit. System utilizes a 6 x 8 centrifugal pump, powered by diesel.



MUD HOUSE

One - 8' x 30' Steel Storage House

COMMUNICATIONS

24-Hour direct telephone interconnection through Hobbs (A.C. 505-397-3291) or Midland - Odessa (A.C. 915-563-0562).

OTHER EQUIPMENT

BLOCKS - Oilwell 350 Ton

HOOK - BJ4300 350 Ton

SWIVEL - NAT N69 350 Ton

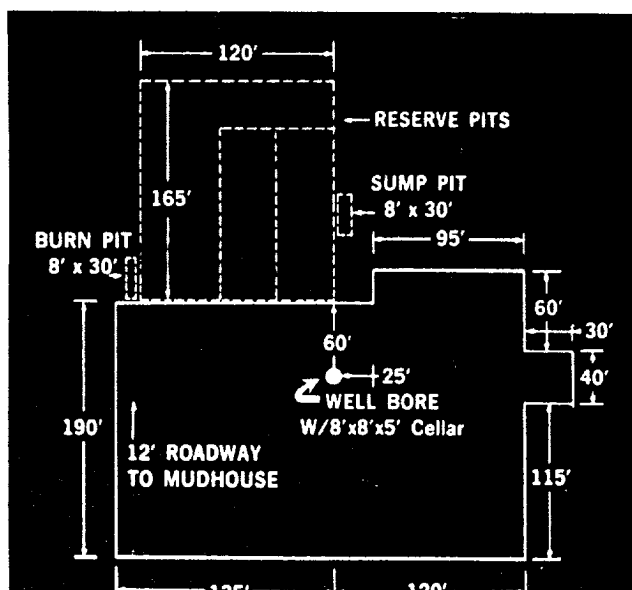
LIGHT PLANTS - One 40 KW and one 20 KW AC generators, powered by diesel engines.

LIGHTS - AC fluorescent or mercury - All vapor proof.

SHALE SHAKER - Link belt, single screen.

FRESH WATER STORAGE - two 500 Bbl., horizontal tanks.

HOUSING - 1 - 8' x 36' airconditioned trailer house, with sleeping and cooking facilities.



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NEW MEXICO OIL CONSERVATION COMMISSION

FORM C-103
(Rev 3-55)

MISCELLANEOUS REPORTS ON WELLS

(Submit to appropriate District Office as per Commission Rule 11-1-64)

RECEIVED DISTRICT OFFICE O. C. C.
JUN 12 10 26 AM '64

Name of Company The Superior Oil Company				Address P. O. Box 1900, Midland, Texas			
Lease Betenbough		Well No. 1	Unit Letter C	Section 32	Township 13-S	Range 36-E	
Date Work Performed June 3, 1964		Pool Wildcat			County Lee		

THIS IS A REPORT OF: (Check appropriate block)

- ☐ Beginning Drilling Operations
 ☐ Casing Test and Cement Job
 ☐ Other (Explain):
- ☒ Plugging
 ☐ Remedial Work

Detailed account of work done, nature and quantity of materials used, and results obtained.

Drilled to TD of 14,780'. Ran 310' of 2-1/2" tubing on 4-1/2" drill pipe to 14,780'. Circulated and conditioned mud 6 hours to 9.0-40-9 cc. Equalized cement plugs using Trinity Inferno on first 3 plugs and regular on last 3 plugs with tubing bottomed as follows: 50 sack @ 14,780', 25 sack @ 12,200', 25 sack @ 10,900', 25 sack @ 8150', 25 sack @ 6100', and 50 sack with 21 Caci @ 4620'. Laid down 4-1/2" drill pipe. Ran drill pipe with bit, found top of cement plug @ 4500' inside 9-5/8" casing. Laid down remainder of 4-1/2" drill pipe. Removed blowout preventer. Cut off 13-3/8" and 9-5/8" casing. Placed 10 sack cement plug @ surface. Installed dry hole marker. Plugged and abandoned June 3, 1964.

Plugging instructions were obtained verbally from Mr. Joe Loney on June 2, 1964.

Witnessed by Ed Dewey		Position Tool Pusher		Company The Superior Oil Company		
FILL IN BELOW FOR REMEDIAL WORK REPORTS ONLY						
ORIGINAL WELL DATA						
D F Elev.	TD	PBTD	Producing Interval	Completion Date		
Tubing Diameter	Tubing Depth	Oil String Diameter	Oil String Depth			
Perforated Interval(s)						
Open Hole Interval			Producing Formation(s)			
RESULTS OF WORKOVER						
Test	Date of Test	Oil Production BPD	Gas Production MCFPD	Water Production BPD	GOR Cubic feet/Bbl	Gas Well Potential MCFPD
Before Workover						
After Workover						
OIL CONSERVATION COMMISSION				I hereby certify that the information given above is true and complete to the best of my knowledge.		
Approved by <i>Leslie A. Clement</i>				Name <i>B. H. Friesland, Jr.</i> (B. H. Friesland, Jr.)		
Title				Position Petroleum Engineer		
Date				Company The Superior Oil Company		

THE SUPERIOR OIL COMPANY

HOBBS OFFICE O. C. C.

MIDLAND, TEXAS

JUN 17 10 29 AM '64

June 16, 1964

NEW MEXICO OIL CONSERVATION COMMISSION
P. O. Box 1980
Hobbs, New Mexico

Re: The Superior Oil Company's Betenbough #1
Tabulation of Deviation Surveys

Gentlemen:

Please substitute the Attached Corrected tabulation for the
subject well.

Yours truly,

THE SUPERIOR OIL COMPANY


B. H. Freeland, Jr.

DE:d1

THE SUPERIOR OIL COMPANY
BETENBOUGH NO. 1
TABULATION OF DEVIATION SURVEYS

LOCATION: 660' FNL & 1980' FWL
SECTION 32, T-13-S, R-36-E
LEA COUNTY, NEW MEXICO

<u>DEPTH</u> <u>(FEET)</u>	<u>DEVIATION</u> <u>(DEGREES)</u>	<u>DEPTH</u> <u>(FEET)</u>	<u>DEVIATION</u> <u>(DEGREES)</u>	<u>DEPTH</u> <u>(FEET)</u>	<u>DEVIATION</u> <u>(DEGREES)</u>
120	1/4	6190	1-1/2	11,311	1
367	3/4	6490	1-1/4	11,470	3/4
740	1/2	6917	1	11,553	3/4
1019	1/2	7156	3/4	11,742	3/4
1357	1/4	7405	1	11,888	1/2
1931	1	7639	3/4	12,073	1/2
2044	3/4	7839	1	12,173	1/2
2199	1/4	7949	3/4	12,214	3/4
2572	1/4	8167	1	12,293	1
2885	1/2	8493	1	12,427	3/4
3100	3/4	8744	1	12,564	1-1/4
3391	1-1/2	8946	1	12,671	1-1/4
3578	1-1/2	9110	1	12,812	1-1/4
3652	1-1/2	9297	1	12,997	1
3919	2-1/2	9469	1-1/4	13,137	1-1/2
4013	2-1/4	9724	1-1/2	13,228	1-1/4
4139	2	9906	1-1/2	13,444	2
4498	1-3/4	10,039	1-1/2	13,563	1-3/4
4600	1-3/4	10,115	1-1/2	13,688	3
4786	2	10,205	1-1/2	13,975	3
4910	1-3/4	10,256	1-1/2	14,172	3
5000	1-1/2	10,349	1-1/2	14,246	3
5215	1-1/2	10,566	3/4	14,318	2-3/4
5395	1-1/4	10,808	3/4	14,480	2
5677	1-3/4	11,003	3/4	14,633	3-1/4
5920	1-3/4	11,200	1	14,722	3-1/4

I certify that the above information is true and complete to the best of my knowledge.

B.H. Freeland, Jr.
B. H. Freeland, Jr.
Petroleum Engineer
THE SUPERIOR OIL COMPANY

Subscribed & Sworn before me this 11th day of June, 1964.

My Commission Expires June 1, 1965

Donald W. Eastwood
DONALD W. EASTWOOD