

N.M.O.C. COPY

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 ☐ GAS WELL ☒ DRY ☐ Other ☐
b. TYPE OF COMPLETION: NEW ☐ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other ☐

2. NAME OF OPERATOR

BLACKROCK OIL COMPANY

3. ADDRESS OF OPERATOR

1000 V & J Tower, Midland, Tx 79701

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

At surface

Unit H, 1980 FNL & 660 FEL

At top prod. interval reported below

At total depth

Same

14. PERMIT NO.

15. DATE SPUDDED

11-16-71

16. DATE T.D. REACHED

12-19-71

17. DATE COMPL. (Ready to prod.)

2-28-72

18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*

3973' G.L.

19. ELEV. CASINGHEAD

3973'

20. TOTAL DEPTH, MD & TVD

6477'

21. PLUG, BACK T.D., MD & TVD

5810'

22. IF MULTIPLE COMPL., HOW MANY*

2

23. INTERVALS DRILLED BY

ROTARY TOOLS

CABLE TOOLS

0-6477'

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*

5784' - 1200'-1420' (SWD 8-5/8"-5-1/2" Csg. Annulus)

25. WAS DIRECTIONAL SURVEY MADE

NO

26. TYPE ELECTRIC AND OTHER LOGS RUN

Gamma Ray - Acoustilog

27. WAS WELL CORED

No

28. CASING RECORD (Report all strings set in well)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
12-3/4"	34#	30'	16"	Conductor Only	
8-5/8"	24#	1186'	11"	485 sx	Circulated
5-1/2"	15.5#	6310'	7-7/8"	300 sx	None

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2-3/8"	5682'	5682'

31. PERFORATION RECORD (Interval, size and number)

5784' Only (Sand Drill)

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
5784'	500 Gals. 15% D3-30

33.* PRODUCTION

DATE FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)				WELL STATUS (Producing or Shut In)	
3- 8-72		Flowing				Shut In	
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD. N° FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
3- 9-72	24 hrs.	20/64	→		794 MCF	360	All Gas
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)	
450	-0-	→		794 MCF	360	N/A	

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

Vented

TEST WITNESSED BY

West Engineering - Hobbs, N.M.

35. LIST OF ATTACHMENTS

Forms 9-330, C-122, C-123, 9-331, C-104, DST's, Deviation Record, Logs, SWD Application

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED

O.D. Buttenfield

President

DATE

March 20, 1972

*(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		38. GEOLOGIC MARKERS	
FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
San Andres	1200'	1420'	
Cisco	5725'	5905'	
Wolfcamp	6109'	6234'	
Devonian	6250'	6355'	

MEAS. DEPTH	TRUE VERT. DEPTH

NEW MEXICO OIL CONSERVATION COMMISSION

OPERATOR Blackrock Oil Company ADDRESS 1000 V & J Tower, Midland, Texas
 FIELD Haystack Cisco LEASE Bates McIntyre - Federal WELL NO. 1
 LOCATION 1980' FNL & 660' FEL, Sec. 9, T-6-S, R-27-E, Chaves County, New Mexico

DEVIATION RECORD	
DEPTH	DEGREES
510	1/2
1000	3/4
1186	3/4
1586	1
1947	3/4
2461	3/4
3058	1
3454	1
3896	1-1/4
4175	1
4497	1-1/4
4727	1-1/4
5230	1-1/4
5483	2
5790	3/4
6078	3/4
6282	1
6477	1

Certification of personal knowledge of Deviation Record:

I hereby certify that I have personal knowledge of the data and facts placed on this form, and that such information is true and complete.

J. H. Slusher
 Signature
ARD DRILLING COMPANY
 Company

STATE OF TEXAS
 COUNTY OF MIDLAND

Before me, the undersigned authority, on this day personally appeared *O. H. Butler*, known to me to be the person whose name is subscribed hereto, who, after being duly sworn, on oath states that he is acting at the direction and on behalf of the operator of the well identified in this instrument and that such well was not intentionally deviated from the vertical.

J. H. Slusher
 Signature
President
 Title

Sworn and Subscribed to before me, this the 29th day of March, 19 72

JANEL HOLCOMB
 My Commission Expires June 1, 1973

Janel Holcomb
 Notary Public in and for Midland County,
 Texas.

OIL AND GAS DIVISION

Fo.
(Rev.

CEMENTING REPORT

*1. Field Name (as per RRC Records or Wildcat) <i>Haystack</i>			*2. RRC District			
*3. Operator <i>Blackrock Oil Company</i>			*4. County <i>Chaves</i>			
*5. Lease Name(s) and RRC Lease Number(s) or I. D. Number(s) <i>Bates & McIntyre Federal</i>			*6. Well Number <i>1</i>			
*7. Location (Section, Block, and Survey) <i>Unit H, Section 9, T-6-S, R-27-E</i>						

CASING CEMENTING DATA:	SURFACE CASING	INTER-MEDIATE CASING	PRODUCTION CASING		MULTI-STAGE CEMENTING PROCESS	
			Single String	Multiple Parallel Strings	Tool	Shoe
*8. Cementing Date	<i>11-19-71</i>					
*9. (a) Size of Drill Bit (inches)	<i>11"</i>					
(b) Estimated % Wash or Hole Enlargement Used in Calculations.						
*10. Size of Casing (Inches O.D.)	<i>8 7/8"</i>					
*11. Top of Liner (if liner used) (ft.)						
*12. Setting Depth of Casing (ft.)	<i>1186'</i>					
13. Type API Class Cement & Amount of Additives Used: (a) In First (Lead) or Only Slurry (If additional space is needed, use "REMARKS" on reverse side.)	<i>C-150 2750 lbs</i>					
(b) In Second Slurry						
(c) In Third Slurry						
14. Sacks of Cement Used:						
(a) In First (Lead) or Only Slurry	<i>4853 lbs</i>					
(b) In Second Slurry						
(c) In Third Slurry						
(d) Total Sacks of Cement Used						
15. Slurry Volume per Sack of Cement (cu.ft./sack):						
(a) In First (Lead) or Only Slurry	<i>1.32 cu ft</i>					
(b) In Second Slurry						
(c) In Third Slurry						
16. Volume of Slurry Pumped: (cu. ft.) (Item 14 x Item 15)						
(a) In First (Lead) or Only Slurry	<i>640 cu ft</i>					
(b) In Second Slurry						
(c) In Third Slurry						
(d) Total Slurry Volume Pumped (cu.ft.)	<i>640 cu ft</i>					
17. Calculated Annular Height of Cement Slurry behind Pipe (ft.)	<i>Surface</i>					
18. Was cement circulated to ground surface (or bottom of cellar) outside casing? (Yes or No)	<i>Yes</i>					

CEMENTING TO PLUG AND ABANDON DATA:	PLUG NO. 1	PLUG NO. 2	PLUG NO. 3	PLUG NO. 4	PLUG NO. 5	PLUG NO. 6
19. Cementing Date						
*20. Size of Hole or Pipe in which Plug Placed (inches)						
*21. Depth to Bottom of Tubing or Drill Pipe (ft.)						
22. Sacks of Cement Used (each plug)						
23. Slurry Volume Pumped (cu. ft.)						
24. Calculated Top of Plug (ft.)						
*25. Measured Top of Plug (if tagged) (ft.)						

(CEMENTING COMPANY AND OPERATOR MUST COMPLY WITH THE INSTRUCTIONS ON REVERSE SIDE HEREOF.)

- OVER -

* Designates items to be completed by Operator. Items not so designated shall be completed by Cementing Company.

26. Remarks:

27. Remarks:

CEMENTING COMPANY

I declare under penalties prescribed in Article 6036c, R. C. S., 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.

Signature of Cementer or Authorized Representative

Name of Person and Title (type or print)

Cementing Company

Street Address or P.O. Box

City, State

Telephone

Area Code

Date

*** OPERATOR**

I declare under penalties prescribed in Article 6036c, R. C. S., 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 and information presented herein.

Signature of Operator or Authorized Representative

O. D. Butler - President

Name of Person and Title (type or print)

BLACKROCK OIL COMPANY

*Operator

1000 V & J Tower

Street Address or P.O. Box

Midland, Texas

*City, State

Zip Code

683-5691

Area Code

915

*Date

March 20, 1972

INSTRUCTIONS

1. A. This form shall be filed by the operator in the RRC District Office with:
 - (1) Each copy of an initial Form G-1 or W-2 if a cementing report is required by Statewide or Special Rules, or if exception is needed to cementing requirements in Statewide or Special Rules;
 - (2) Each copy of Form W-3;
 - (3) Each copy of Form W-4 if a multiple parallel casing completion.
- B. At least an original and one copy of this form shall be filed for each cementing company used on a well.
- C. The cementing of different casing strings on a well by one cementing company may be consolidated on one form (to be filed in duplicate).
2. Cementing Company and Operator shall comply with the applicable portions of Statewide Rules 8, 13, and 14. For offshore operations, Cementing Company and Operator shall comply with Statewide Rule 13(E).
3. If setting FULL AMOUNT OF SURFACE CASING:
 - A. Depth to protect fresh water determined by:
 - (1) Field Rule
 - (2) Texas Water Development Board, if no Field Rule
 - B. Set surface casing below depth to be protected and cement from casing shoe to ground surface.
4. IF SETTING ANYTHING OTHER THAN THE FULL AMOUNT OF SURFACE CASING, PERMISSION SHALL BE OBTAINED FROM THE RAILROAD COMMISSION.
 - A. If no multi-stage tool is used, the next deeper casing string shall be cemented from the casing shoe to the surface.
 - B. If using the multi-stage tool on the next deeper string, cement from the depth that protects fresh water sands to the surface.
5. If setting NO SURFACE CASING (See Item 4 above.):
 - A. Cement short surface casing from the shoe to the surface.
 - B. Whether the multi-stage tool is or is not used on the next deeper casing string, cement from the depth that protects fresh water sands to:
 - (1) the surface, or
 - (2) a point midway between shoe of surface string and the surface. Compliance will be considered if a temperature survey shows the top of the cement is at least one-third of the distance from the shoe of the surface string to the surface.
7. Setting PRODUCTION STRING of Casing: (Statewide Rules; Special Rules may vary.)
 - A. Cement to a point at least 600 feet above the casing shoe.
 - B. When 3,000 feet or more of pipe is set for the production or protecting string, a minimum of 30 feet of cement shall be
8. PLUGGING and ABANDONING:
 - A. Cement plugs shall be placed in the well bore as required by Rules and Regulations of the Commission plus as be specified by the RRC District Director.
 - B. The minimum amount of cement normal used in each plug shall be a slurry volume equal to the amount necessary to plug the hole in well.
 - C. A 10 foot cement plug is required to be placed in the top of the well.

69-1-11
51-W-15



EQUIPMENT & HOLE DATA

Type Test	M. F. E. OPEN HOLE		
Formation Tested	-		
Elevation	-	Ft.	
Net Productive Interval	-	Ft.	
Estimated Porosity	-	%	
All Depths Measured From	KELLY BUSHING		
Total Depth	5860	Ft.	
Main Hole/Casing Size	7 7/8"		
Rat Hole/Liner Size	-		
Drill Collar Length	462'	I.D.	2.5"
Drill Pipe Length	5240'	I.D.	2.7"
Packer Depth(s)	5729' & 5735	Ft.	

Sampler Pressure 950 P.S.I.G. at Surface
 Recovery: Cu. Ft. Gas 6.35
 cc. Oil -
 cc. Water 380
 cc. Mud -
 Tot. Liquid cc. 380
 Gravity - °API @ - °F.
 Gas/Oil Ratio - cu. ft./bbl.

CHLORIDE
CONTENT

Recovery Mud Filtrate _____ @ _____ °F. _____ ppm

Mud Pit Sample Filtrate 0.09 @ 62 °F. 123000 ppm

Mud Type	SALT BASE MUD	Wt.	10.3	
Viscosity	70	Water Loss	10.0	C.C.
Resist. of Mud	0.09 @ 62 °F	of Filtrate	0.09 @ 62 °F	
Chloride Content	123000			PPM

[illegible]

Remarks: _____

Address 1000 V AND J TOWER; MIDLAND, TEXAS 79701

Company BLACK ROCK OIL COMPANY

Company BATES AND MC INTYRE FEDERAL #1
Well

Well _____
Test Interval 5735' To 5860'

Location _____

Test # X 1-C

Field HAYSTACK

Date 12-3-71

County CHAVES State NEW MEXICO

County ADKINS (HOBBS) State MR. O. D. BUTLER
Technician ADKINS (HOBBS) Test Approved By MR. O. D. BUTLER

Field Report No. 19196 B

No. Reports Requested 16 (6x's)

[illegible]



EQUIPMENT & HOLE DATA

Type Test	M. F. E. OPEN HOLE		
Formation Tested	DEVONIAN		
Elevation	-		Ft.
Net Productive Interval	-		Ft.
Estimated Porosity	-		%
All Depths Measured From	KELLY BUSHING		
Total Depth	6220		Ft.
Main Hole/Casing Size	7 7/8"		
Rat Hole/Liner Size	-		
Drill Collar Length	525'	I.D.	2.5"
Drill Pipe Length	5598'	I.D.	2.7"
Packer Depth(s)	6150 & 6156		Ft.

Sampler Pressure 750 P.S.I.G. at Surface
 Recovery: Cu. Ft. Gas .25
 cc. Oil -
 cc. Water 2480
 cc. Mud -
 Tot. Liquid cc. 2480
 Gravity - °API @ - °F.
 Gas/Oil Ratio - cu. ft./bbl.

CHLORIDE
CONTENTRecovery Mud - @ - °F.
Recovery Mud Filtrate - @ - °F. - ppm

Mud Pit Sample .10 @ 52 °F.
Mud Pit Sample Filtrate .10 @ 52 °F. 118000 ppm

Mud Type	SALT BASE MUD	Wt.	10.0	
Viscosity	70	Water Loss	4.8	C.C.
Resist. of Mud	.10 @ 52	°F; of Filtrate	.10 @ 52	°F
Chloride Content	118000			PPM

[illegible]

Remarks: _____

Address 1000 V AND J TOWER; MIDLAND, TEXAS 79701

Company BLACKROCK OIL COMPANY Field HAYSTACK

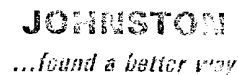
Well BATES AND MC INTYRE FEDERAL #1 Location -

Test Interval 6156' TO 6220' Test # X 2 Date 12-6-71

County CHAVES State NEW MEXICO Field Report No. 19198 B

Technician ADKINS (HOBBS) Test Approved By MR. NORBERT D. MC INTYRE No. Reports Requested 16 (6x's)

[illegible]



EQUIPMENT & HOLE DATA

Type Test	M. F. E. OPEN HOLE		
Formation Tested	-		
Elevation	-		Ft.
Net Productive Interval	-		Ft.
Estimated Porosity	-		%
All Depths Measured From	ROTARY BUSHING		
Total Depth	6409		Ft.
Main Hole/Casing Size	7 7/8"		
Rat Hole/Liner Size	-		
Drill Collar Length	450'	I.D.	2.25"
Drill Pipe Length	5808'	I.D.	3.35"
Packer Depth(s)	6284 & 6290		Ft.

Sampler Pressure	30	P.S.I.G. at Surface
Recovery: Cu. Ft. Gas	.30	
cc. Oil	-	
cc. Water	-	
cc. Mud	20	
Tot. Liquid cc.	20	
Gravity	- °API @ -	°F.
Gas/Oil Ratio	-	cu. ft./bbl.

CHLORIDE
CONTENT

Recovery Mud - @ - °F.
Recovery Mud Filtrate - @ - °F. 100000 ppm

Mud Pit Sample - @ - °F.
Mud Pit Sample Filtrate - @ - °F. 120000 ppm

Mud Type	STARCH	Wt.	10.0
Viscosity	45	Water Loss	20 C.C.
Resist. of Mud	- @ - °F	of Filtrate	- @ - °F
Chloride Content	120000		PPM

[illegible]

Address 1000 V & J TOWER; MIDLAND, TEXAS 79701

Company BLACKROCK OIL COMPANY

Well BATES-MC INTYRE #1

Test Interval 6290' TO 6409'

Field HAYSTACK

Location _____

Test # X 3

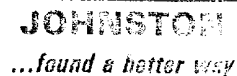
Date 12-10-71

County CHAVES State NEW MEXICO

Technician SHILLING (HOBBS) Test Approved By MR. M. R. TOOMBS

Field Report No. 19341 B

No. Reports Requested 24 (6x's)

[illegible]



...found a better way

SURFACE INFORMATION

[illegible]

Cushion Type	Amount	Pressure	Bottom Choke Size <u>5/8"</u>
	-		

MUD DATA

Mud Type	SALT GEL	Wt.	10.0	
Viscosity	50	Water Loss	10.0	C.C.
Resist: of Mud	.07 @ 64	°F ₂ of Filtrate	.07 @ 64	°F
Chloride Content	122000			PPM

EQUIPMENT & HOLE DATA

Type Test	M. F. E. OPEN HOLE		
Formation Tested	DEVONIAN		
Elevation	-		Ft.
Net Productive Interval	-		Ft.
Estimated Porosity	-		%
All Depths Measured From	KELLY BUSHING		
Total Depth	6477		Ft.
Main Hole/Casing Size	7 7/8"		
Rat Hole/Liner Size	-		
Drill Collar Length	540'	I.D.	2.5"
Drill Pipe Length	5863'	I.D.	2.2"
Packer Depth(s)	6431 & 6437		Ft.

**MULTI-FLOW EVALUATOR
FLUID SAMPLE DATA**

Sampler Pressure	_____	-	_____	P.S.I.G. at Surface
Recovery: Cu. Ft. Gas	_____	-	_____	
cc. Oil	_____	-	_____	
cc. Water	_____	-	_____	
cc. Mud	_____	1240	_____	
Tot. Liquid cc.	_____	1240	_____	
Gravity	_____	-	° API @	_____ ° F.
Gas/Oil Ratio	_____	-	_____	cu. ft./bbl.

	RESISTIVITY	CHLORIDE CONTENT
Recovery Water	_____ @ _____ °F.	_____ - ppm
Recovery Mud	_____ @ _____ °F.	
Recovery Mud Filtrate	_____ @ _____ °F.	_____ - ppm
Mud Pit Sample	_____ @ _____ °F.	
Mud Pit Sample Filtrate	_____ @ _____ °F.	122000 ppm

[illegible]

Remarks:

Address 1000 V & J TOWER; MIDLAND, TEXAS 79701

Company BLACKROCK OIL COMPANY Field HAYSTACK

Well BATES-MC INTYRE #1 Location -

Test Interval 6437' to 6477' Test # 84 Date 12-13-71

County CHAVES State NEW MEXICO Field Report No. 22135 B

Technician HART (HOBBS) Test Approved By MR. M. L. TOOMBS No. Reports Requested 24 (6x's)

Field Report No. 22135 8
No. Reports Requested 24 (6x's)

PRESSURE DATA

Instrument No.	J-028			Field Report No. <u>22135 B</u>	
Capacity (P.S.I.G.)	6400				
Instrument Depth	6471'				
Instrument Opening	INSIDE				
Pressure Gradient P.S.I./Ft.					
Well Temperature °F.	124				
				TIME DATA	
Initial Hydrostatic Mud	A	3479		Time Given	Time Computed
Initial Shut-in	B *	188		45 Mins.	Mins.
Initial Flow	C	80		15 Mins.	Mins.
	C-1	80		- Mins.	Mins.
	C-2	86		- Mins.	Mins.
Final Flow	D	89		90 Mins.	Mins.
Final Shut-in	E *	368		150 Mins.	Mins.
Final Hydrostatic Mud	F	3493			
Remarks:					

* Shut in pressure did not reach static reservoir pressure.

Clock Travel _____ inches per min.

PRESSURE INCREMENTS

[illegible]