

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUPLICATE*

(See other in-
structions on
reverse side)Form approved.
Budget Bureau No. 42-R355.5.

5. LEASE DESIGNATION AND SERIAL NO.

LC029387(C)

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Shugart (APCO) "A"

9. WELL NO.

5

10. FIELD AND POOL, OR WILDCAT

Shugart Y. SR, Q, GR

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

Sec. 29, T 18S, R 31E

12. COUNTY OR
PARISH

Eddy,

13. STATE

New Mexico

1a. TYPE OF WELL:

OIL
WELL ☒GAS
WELL ☐DRY ☐

Other

b. TYPE OF COMPLETION:

NEW
WELL ☒WORK
OVER ☐DEEP-
EN ☐PLUG
BACK ☐DIFF.
RESVR. ☐

Other

2. NAME OF OPERATOR

Shenandoah Oil Corporation

3. ADDRESS OF OPERATOR

1500 Commerce Building, Fort Worth, Texas 76102

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

At surface 2310 FNL and 1680 FEL Sec. 29

At top prod. interval reported below

At total depth

14. PERMIT NO.

DATE ISSUED

15. DATE SPUDDED

8-30-70

16. DATE T.D. REACHED

9-11-70

17. DATE COMPL. (Ready to prod.)

10-9-70

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

3629 RKB

19. ELEV. CASINGHEAD

3621'

20. TOTAL DEPTH, MD & TVD

3965

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

3710

22. IF MULTIPLE COMPL.,
HOW MANY*23. INTERVALS
DRILLED BY

ROTARY TOOLS

CABLE TOOLS

Rotary

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

Upper Queens: 3270-3280
3300-3310Lower Queens: 3532-3534
3536-3538
3540-354625. WAS DIRECTIONAL
SURVEY MADE

Yes

26. TYPE ELECTRIC AND OTHER LOGS RUN

Bottom Hole Caliper - Sonic Log

27. WAS WELL CORED

Yes

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

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
8 5/8"	28#	776'	10"	175 sxs w/2% gel.	None
				200 sxs w/2% CaCl2	
5 1/2"	15.5#	3965'	7 1/2"	325 sxs Class "C" w/ 3# salt per sx.	None

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2" EUE	3410'	-

31. PERFORATION RECORD (Interval, size and number)

3270 - 3280	2 SPF (1/2")	20 holes
3300 - 3310	" "	20 holes
3528 - 3530	4 " "	8 holes
3532 - 3534	4 " "	8 holes
3536 - 3538	4 " "	8 holes
3540 - 3546	4 " "	24 holes

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
3270 - 3310'	15,000 gals gelled water
3528 - 3546'	15,000 gals gelled water
NOTE: Each stage contained 15,000# 20-40 sand and spearheaded w/1500 gls. 15% H.R. acid.	

33.* TOTAL 88 holes PRODUCTION

DATE FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)				WELL STATUS (Producing or shut-in)	
10-11-70		Pumping 2" x 1 1/4" x 8' insert pump				Producing	
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
10-12-70	24	-	→	30	TSTM	2	-
FLOW, TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)	
-	-	→	-	-	-	33	

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

Sold

TEST WITNESSED BY

C. W. Downey, Jr.

35. LIST OF ATTACHMENTS

1. "CO" B. H. C. Sonic log; 2. Core Analysis; 3. Deviation Survey

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

SIGNED

T. P. Bates

TITLE

Manager Secondary

DATE

10/14/70

*(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 38, 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 38. 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.	NAME	MEAS. DEPTH	TRUE VERT. DEPTH
Surface	0	280'				
Redbeds Anhy. Salt	280	1900'		Base Salt	1900	+1729
Anhy. & Gypsum	1900	2100'				
Anhy. w/Shale & Sd. Stringers	2100	3270'				
Sand (Shaw)	3270	3314'	Upper Queen Sand	Queen Formation	3270	+ 359
Anhy. v/Sd. Stringers	3314	3514'				
Sand (show)	3514	3550'	Lower Queen Sand			
Dolomite	3550	3794'	(Water)			
Sand	3794	3806'	(Water)			
Dolomite	3806	3870'	(Water)			
Sand	3870	3888'	(Water)			
Dolomite	3880	3900'	(Water)			
Sand	3900	3920'	(Water)			
Dolomite	3920	3965'	T.D.			

CORE ANALYSIS RESULTS

Company: SHERIDAN OIL CORPORATION Formation: AS NOTED File: WF-3-3339
 Core No.: 5 Core Type: DIAMOND 4" Date Report: 9-2-70
 Drilling Fluid: WATER BASE MUD Analyst: NEFT
 State: NEW MEX Elev: 3229' GL Location: 2310 FN & 1980 FEL SEC 22-T18S-R31E

Lithological Abbreviations

DOLOMITE DOL	ANHYDRITE ANHY	SANDY SHY	FINE FN	CRYSTALLINE XEN	BROWN BBN	FRACTURED FRAC	SLIGHTLY SL
CHERT CH	CONGLOMERATE CONC	SHALY SHY	MEDIUM MED	GRAIN GRN	GRAY GY	LAMINATION LAM	VERY V
GYPSUM GYP	FUSSILITEFOUS FOSS	LIMY LMY	COARSE CSE	GRANULAR GRN	VUGGY VGY	STYOLITIC STY	WITH W

DEPTH FEET	PERMEABILITY MILLIDARCY	POROSITY PERCENT	RESIDUAL SATURATION PER CENT PORE OIL	TOTAL WATER	SAMPLE DESCRIPTION AND REMARKS
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CONVENTIONAL ANALYSIS

CORE NO. 1 2495.0-2510.0 YATES

2495.0-02.0	DOL, SHY				
2502.0-04.0	SH, DOL				
04.0-06.0	DOL, SHY				
2506.0-07.0	<0.1	2.7	55.6	14.8	DOL
07.0-08.0	<0.1	1.8	44.3	22.2	DOL
08.0-09.0	<0.1	2.5	52.0	16.0	DOL
2509.0-10.0	DOL, SHY				
10.0-12.0	ANHY, SHY				
12.0-14.0	SD, SHY				
2514.0-15.0	0.5	8.6	8.2	74.5	SD
15.0-16.0	<0.1	5.9	15.2	56.0	SD
16.0-17.0	0.2	7.4	9.5	63.5	SD
17.0-18.0	0.1	6.2	11.3	59.7	SD
18.0-19.0	<0.1	4.5	15.5	55.7	SD
2519.0-21.0	SD, SHY				
21.0-23.0	ANHY				
23.0-25.0	DOL				
25.0-27.0	SH, ANHY				
27.0-31.0	ANHY, SHY				
31.0-35.0	ANHY				
35.0-37.0	DOL				
37.0-39.0	ANHY				
39.0-42.0	SH, ANHY				
42.0-46.0	ANHY, SHY				
46.0-49.0	SH, ANHY				
2549.0-50.0	LOST CORE				

CORE NO. 2 3219.0- 275.0 QUEEN

3219.0-20.0	DOL, ANHY				
20.0-22.0	SH, DOL				
22.0-26.0	DOL, ANHY				
26.0-30.0	DOL, ANHY				

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Petroleum Reservoir Engineering
DALLAS, TEXAS

File WP-3-3339 Page No. 2

Well SHUGART (AFCO) "A" NO. 5

CORE ANALYSIS RESULTS

DEPTH FEET	PERMEABILITY MILLIDARCYS	POROSITY PER CENT	RESIDUAL SATURATION PER CENT FORM		SAMPLE DESCRIPTION AND REMARKS
			OIL	TOTAL WATER	
3236.0-38.0	DCL				
38.0-42.0	ANHY				
42.0-50.0	ANHY, SHY				
50.0-51.0	DCL				
51.0-54.0	ANHY				
54.0-55.0	ANHY, SHY				
55.0-57.0	ANHY, DCL				
57.0-69.0	DCL, SDY				
3269.0-70.0	<0.1	3.3	0.0	51.5	SD
70.0-71.0	<0.1	3.5	0.0	65.8	SD
71.0-72.0	0.3	8.7	8.1	56.4	SD
72.0-73.0	<0.1	4.1	0.0	66.0	SD
73.0-74.0	<0.1	3.4	0.0	67.7	SD
3274.0-75.0	0.5	8.9	10.1	55.0	SD
CORE NO. 3 3455.0-3511.0 PENROSE					
3455.0-67.0	ANHY, DCL				
67.0-78.0	DCL, ANHY				
78.0-79.0	ANHY				
79.0-88.0	DCL, ANHY				
88.0-98.0	DCL				
98.0-99.0	SAMPLE				
3499.0-05.0	DCL, ANHY				
3505.0-11.0	DCL, SHY				

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DALLAS, TEXAS

File WP-3-3339 Page No. 3Well SHUGART (APCO) "A" NO. 5

CORE ANALYSIS RESULTS

DEPTH FEET	PERMEABILITY MILLIDARCY	POROSITY PER CENT	RESIDUAL SATURATION PER CENT PORE		SAMPLE DESCRIPTION AND REMARKS
			OIL	TOTAL WATER	
3860.0-69.0 DCL					
69.0-70.0 SS					
70.0-71.0	2.5	15.0	4.7	62.0	SS
71.0-72.0	3.0	17.5	12.0	58.5	SS
72.0-73.0	2.2	17.2	6.4	54.0	SS
73.0-74.0	1.2	20.1	10.0	56.2	SS
74.0-75.0	12	19.5	10.2	55.4	SS
75.0-76.0	4.0	18.0	12.8	51.7	SS
76.0-77.0	10	18.0	1.1	61.8	SS
77.0-78.0	2.3	19.0	5.8	62.8	SS
78.0-79.0	5.7	18.2	14.3	52.8	SS
79.0-80.0	12	20.2	12.9	47.0	SS
80.0-85.0 SS					
85.0-94.0 DCL					
94.0-95.0	<0.1	6.3	0.0	74.7	SS
95.0-96.0	<0.1	8.6	0.0	75.7	SS
96.0-97.0	0.6	11.6	0.0	72.5	SS
97.0-98.0	1.1	14.6	0.0	67.2	SS
98.0-99.0	2.3	20.1	0.0	69.0	SS
99.0-11.0 SS					
3911.0-16.0 lost core					

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AMERICAN ARMY

OCT 19 1970

KENNETH D. REYNOLDS - ARTESIA
LESLIE K. EVERTSON - ROSWELL

WEK DRILLING CO., INC. - OIL WELL DRILLING CONTRACTORS

P. O. BOX 2055 ROSWELL, NEW MEXICO 88201
TELEPHONE: ARTESIA 746-6757
ROSWELL 623-5070

October 16, 1970

Shenandoah Oil Corporation
1018 Commerce Building
Ft. Worth, Texas

Attention: Mr. Bates

Reference: Sugart APCO (A# *5 G*)
Sec. 29, 18S, 31E, Eddy County, N. M.

Gentlemen:

The following is a Deviation Survey for the referenced well:

500'	- 3/4	degrees
998'	- 1	"
1480'	- 1	"
1996'	- 1 1/4	"
2495'	- 1 1/2	"
2996'	- 1 1/2	"
3219'	- 1 1/4	"
3719'	- 1	"
3960'	- 3/4	"

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U.S. DEPT. OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Yours very truly,

WEK DRILLING CO., INC.,

Kenneth D. Reynolds
Kenneth D. Reynolds

Notary Public: *[Signature]*

My Commission Expires: *8/6/74*