

STATE CORPORATION COMMISSION OF KANSAS
OIL & GAS CONSERVATION DIVISION
WELL COMPLETION FORM
ACO-1 WELL HISTORY
DESCRIPTION OF WELL AND LEASE

Operator: License # 9855Name: GRAND MESA OPERATING CO.Address: 200 E First St., Suite 307City/State/Zip Wichita, KS 67202

Purchaser: _____

Operator Contact Person: Larry FriendPhone (316) 265-3000Contractor: Name: Discovery Drilling Co., Inc.License: 31548Wellsite Geologist: Larry Friend

Designate Type of Completion

☒ New Well ☐ Re-Entry ☐ Workover☒ Oil ☐ SWD ☐ SIOW ☐ Temp. Abd.☐ Gas ☐ ENHR ☐ SIGW☐ Dry ☐ Other (Core, WSW, Expl., Cathodic, etc)

If Workover/Re-Entry: old well info as follows:

Operator: _____

Well Name: _____

Comp. Date _____ Old Total Depth _____

☐ Deepening ☐ Re-perf. ☐ Conv. to Inj/SWD☐ Plug Back ☐ PSTD☐ Commingled ☐ Docket No. _____☐ Dual Completion ☐ Docket No. _____☐ Other (SWD or Inj?) Docket No. _____

9/9/00 9/16/00 9/17/00
Spud Date Date Reached TD Completion Date

API NO. 15- 135-24,106-0000County Ness50'S of SE - NW - SE Sec. 18 Twp. 17S Rge. 24W X E1600 Feet from S/N (circle one) Line of Section1650 Feet from E/W (circle one) Line of SectionFootages—Calculated from Nearest Outside Section Corner:
NE, SE, NW or SW (circle one)Lease Name Humphrey Well # 3-18Field Name DickmanProducing Formation MississippianElevation: Ground 2397 KB 2405Total Depth 4370 PSTD _____Amount of Surface Pipe Set and Cemented at 232.90 FeetMultiple Stage Cementing Collar Used? X Yes ☐ NoIf yes, show depth set 1644 FeetIf Alternate II completion, cement circulated from 1644feet depth to Surface w/ 190 sx cnt.Drilling Fluid Management Plan
(Data must be collected from the Reserve Pit)Chloride content 17,000 ppm Fluid volume 400 bblsDewatering method used Evaporation

Location of fluid disposal if hauled offsite: _____

Operator Name _____

Lease Name _____ License No. _____

____ Quarter Sec. _____ Twp. _____ S Rng. _____ E/W

County _____ Docket No. _____

INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 200 Colorado Derby Building, Wichita, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. Information on side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form (see rule 82-3-107 for confidentiality in excess of 12 months). One copy of all wireline logs and geologist well report shall be attached with this form. ALL CEMENTING TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells.

All requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Signature Ronald N. SinclairTitle President Date 10/17/00Subscribed and sworn to before me this 17th day of October, 2000.Notary Public Mary F. CombsDate Commission Expires: 8/25/2004 (973)

K.C.C. OFFICE USE ONLY

F ☐ Letter of Confidentiality Attached
C ☐ Wireline Log Received
C ☐ Geologist Report Received

Distribution

☐ KCC ☐ SWD/Rep ☐ NGPA
☐ KGS ☐ Plug ☐ Other (Specify)

MARY F. COMBS
Notary Public-State of Kansas
My Appt. Exp. 8/25/2004

Operator Name GRAND MESA OPERATING CO.Lease Name HumphreyWell # 3-18Sec. 18 Twp. 17S Rge. 24W☐ EastCounty Ness☒ West

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all drill stem tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface during test. Attach extra sheets if more space is needed. Attach copy of log.

Drill Stem Tests Taken
(Attach Additional Sheets.)☒ Yes ☐ No

Samples Sent to Geological Survey

☒ Yes ☒ No

Cores Taken

☐ Yes ☒ NoElectric Log Run
(Submit Copy.)☒ Yes ☐ No

List All E.Logs Run:

Radiation Guard Log
w/Self Potential and Caliper☒ Log

Formation (Top), Depth and Datums

☐ Sample

Name	Top	Datum
Anhydrite	1663	+ 742
Bs. Anhydrite	1693	+ 712
Heebner	3706	-1301
Lansing	3747	-1342
Bs Kansas City	4045	-1640
Ft. Scott	4254	-1839
Miss. Dolomite	4359	-1954

CASING RECORD

☒ New ☐ Used

Report all strings set-conductor, surface, intermediate, production, etc.

Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs./Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
Surface Pipe	12 $\frac{1}{4}$	8 5/8	20	232.90	60/40Poz	150	2%Gel&3%CC
Production St.	7 7/8	5 $\frac{1}{2}$	14	4360	60/40Poz	125	2%Gel&10%Salt
			DV@1644		SMDC	190	$\frac{1}{4}$ #FC/sk

ADDITIONAL CEMENTING/SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	#Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate				
<input type="checkbox"/> Protect Casing				
<input type="checkbox"/> Plug Back TD				
<input type="checkbox"/> Plug Off Zone				

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used)	Depth

TUBING RECORD		Size	Set At	Packer At	Liner Run	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
		2 7/8"	4358KB				
Date of First, Resumed Production, SWD or Inj.			Producing Method				
10-01-00			<input type="checkbox"/> Flowing <input checked="" type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain)				
Estimated Production	Oil	Bbls.	Gas	Mcf	Water	Bbls.	Gas-Oil Ratio
Per 24 Hours	29		0		105		Gravity
							37°

Disposition of Gas:

METHOD OF COMPLETION

Production Interval

☐ Vented ☐ Sold ☐ Used on Lease
(If vented, submit ACO-18.)

☒ Open Hole ☐ Perf. ☐ Dually Comp. ☐ Commingled
☐ Other (Specify) _____

4360-4370



Discovery Drilling

P.O. Box 763 • Hays, KS 67601 • OFFICE (913) 623-2920 • CELLULAR (913) 635-1511

DRILLER'S LOG

Operator: **Grand Mesa Operating Co.**
200 E First St., Suite 307
Wichita, KS 67202

Contractor: **Discovery Drilling Co., Inc.**
P.O. Box 763
Hays, KS 67601

Lease: Humphrey #3-18

Location: 50'S of SE/NW/SE
Sec. 18/17S/24W
Ness Co., KS

Loggers Total Depth: 4369'

Rotary Total Depth: 4370'

Commenced: 9/9/00

Casing: 8 5/8" @ 232.90' w/ 150sks

5 1/2" @ 4360' w/125 sks

DV @ 1644' w/190 sks

Elevation: 2397' Gr/2405' KB

Completed: 9/17/00

Status: Oil Well

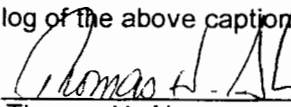
DEPTHS & FORMATIONS

(All from KB)

Surface, Sand & Shale	0'	Shales	1693'
Dakota Sand	711'	Shales & Lime	1961'
Shale	891'	Shales	2141'
Cedar Hill Sand	1131'	Shales & Lime	2595'
Red Bed Shale	1392'	Lime & Shale	3866'
Anhydrite	1662'	RTD	4370'
Base Anhydrite	1693'		

STATE OF KANSAS)
) ss
COUNTY OF ELLIS)

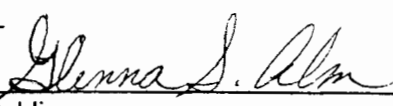
Thomas H. Alm of Discovery Drilling states that to the best of his knowledge the above and foregoing is a true and correct log of the above captioned well.

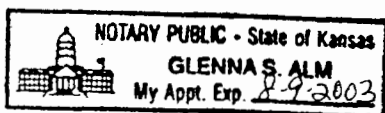

Thomas H. Alm

Subscribed and sworn to before me on 9-19-00

My Commission expires: 8-9-2003

(Place stamp or seal below)


Notary Public



**GRAND
MESA****OPERATING COMPANY**

(316) 265-3000
FAX: (316) 265-3455

307 FARMERS AND BANKERS BUILDING
200 EAST FIRST STREET
WICHITA, KANSAS 67202

COMPLETION REPORT

Well Name: #3-18 Humphrey
Location: 50' S. SE/NW/SE 18-17S-24W
County: Ness County, Kansas

Well Data:

RTD 4370 LTD 4369
Zero: KB = 2405 (8' AGL)
Prod. Csg: 5 1/2' 14# Set @ 4360' KB
Tubing: 141 Jts 2 7/8"
Rods: 172 3/4"
Pump: 2" x 1 1/2" x 12

9/23/00 Move in Fritzler workover rig, bring over 127 tested 2 7/8" tubing joints from Tilley lease and 14 tested joints from rack. Go in with bit, collars and touch DV tool.

9/25/00 Golden B Drilling commenced drilling DV tool at 9:00 A.M. - took 4 hours. Run to bottom plug, drilled down to packer shoe, packer shoe drilling slow.

9/26/00 Finished drilling bottom packer shoe @ 9:30 A.M. Touched bottom at 4373.79 KB, 10 feet of open hole. Circulated 5 minutes on bottom, then move up into casing - finished circulating - total of 1 1/2 hours. Displaced mud with Miss. Water during circulation. Recovered much cement and metal cuttings, cleaning up at end. Come out of hole, change over, run sand pump a dozen times recovering 1 to 2 qts large to fine chunks rock sluff and metal cuttings.

9/27/00 Run sand pump one time, only handful of cuttings and sluff. Go in with tubing string as follows:

Mud anchor & perf. sub	17.81
Seating nipple	1.10
2 jts tubing	64.61
Tubing anchor	2.70
Tubing	4258.16

Tubing subs
KB - stretch

16.00
4.00

Set @

4364.38 KB
measured

Touched bottom, pulled up 12 feet, set 2 feet above open hole.

Set tubing anchor 2 jts up from seating nipple. Run in with swab, found fluid at 100 feet from surface. Total load = 96.73 bbls Started swabbing at 11:45 A.M. making 5 runs/hour. At 3:00 P.M. had swabbed 96.28 bbls fluid, load back. Last 3 swab runs 30%, 40%, 48% oil @ 1.16 bbls/swab run or 5.8 BFPH. Wait 30 minutes swab 2.32 bbls with 69% oil cut. Spot 250 gals 15% mud acid on bottom. Fluid level at 1800 feet from surface equal to 1110 # hydrostatic or 60# over formation bottom hole pressure. Formation would not take acid. Increased fluid level to 800 feet from surface equal to 1550# hydro static. Formation would still not take acid. Let soak overnight.

9/28/00

Fluid level @ 1700' from surface, formation took 900 feet of fluid including all of acid. Started swabbing at 8:00 A.M.. Total load to recover 79 bbls. Rec. 84.1 bbls fluid by 11:30 A.M. with oil cut averaging 17% on last 4 pulls. Recovering approx 500 feet of fluid on each pull. Swabbed 2 more hours with 4 pulls per hour as below:
11:30 - 12:30: Swabbed 10.44 bbls with 17% oil cut.
12:30 - 1:30: Swabbed 10.44 bbls with 21% oil cut.
Total fluid recovered = 105 bbls. Run in with 2" x 1 1/2" x 12' pump and 172 3/4" rods. 71 good used rods came from Tilley lease and went on bottom of string.

**GRAND
MESA****OPERATING COMPANY**

(316) 265-3000
FAX: (316) 265-3455

307 FARMERS AND BANKERS BUILDING
200 EAST FIRST STREET
WICHITA, KANSAS 67202

COMPLETION REPORT CONTINUED

Well Name: #3-18 Humphrey
Location: 50' S. SE/NW/SE 18-17S-24W
County: Ness County, Kansas

9-29-00 Waiting on surface equipment

9-30-00 Waiting on surface equipment

10-1-00 Barrel test

	BF	% Oil	BO
Humphrey 3-18	134	22%	29.48

10-2-00 Barrel test

	BF	% Oil	BO
Humphrey 2-18	128	7%	8.96
Humphrey 3-18	140	16%	22.40

10-9-00 Barrel test

	BF	% Oil	BO
Humphrey 2-18	120	7%	8.40
Humphrey 3-18	134	13%	17.42

10-3-00 Total Oil to Stock 37.48

10-4-00 Total Oil to Stock 31.65

10-5-00 Total Oil to Stock 31.64

10-6-00 Total Oil to Stock 29.98

10-7-00 Total Oil to Stock 27.53

10-8-00 Total Oil to Stock 28.29

10-9-00 Total Oil to Stock 26.19

10-10-00 Total Oil to Stock 26.67

Neither well pounding.

10-13-00	Total Oil to Stock	24.11
10-14-00	Total Oil to Stock	27.57
10-15-00	Total Oil to Stock	23.33
10-16-00	Total Oil to Stock	22.91
10-17-00	Total Oil to Stock	22.48
10-18-00	Total Oil to Stock	21.66
10-19-00	Shot fluid levels	

Humphrey 3-18 118 jts to fluid
 $\frac{x 31}{3658'}$ approx.

Humphrey 2-18 135 jts to fluid
 $\frac{x 31}{4216'}$ approx.

10-20-00	Total Oil to Stock	23.31
	Barrel test	
	BF	% Oil BO
Humphrey 2-18	118	5% 5.90
Humphrey 3-18	137	12% 16.44

Humphrey 3-18 Changed sheave from 7" to 9" Changed
 stroke from 10.75 to 12.5

10-21-00	Total Oil to Stock	33.34
10-22-00	Total Oil to Stock	35.43
10-23-00	Barrel test	
	BF	% Oil BO
Humphrey 2-18	118	5% 5.90
Humphrey 3-18	176	12% 21.12

10-23-00	Total Oil to Stock	30.26
10-24-00	Total Oil to Stock	29.93
10-25-00	Total Oil to Stock	25.77
	Barrel test	
	BF	% Oil B.O.
Humphrey 3-18	169	10% 16.90

10-26-00	Total Oil to Stock	22.32
10-27-00	Total Oil to Stock	25.82
10-28-00	Total Oil to Stock	21.63
10-29-00	Total Oil to Stock	20.80

10-30-00	Total Oil to Stock	22.44	
	Barrel Test		
	BF	% Oil	B.O.
Humphrey 2-18	118	5%	5.90
Humphrey 3-18	163	8%	13.04
	Humphrey 3-18 pounding fluid on top		
10-31-00	Total Oil to Stock	22.45	

FINAL REPORT