

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE\*

(See other In-  
structions on  
reverse side)

Form approved.  
Budget Bureau No. 1004-0137  
Expires August 31, 1985

WELL COMPLETION OR RECOMPLETION REPORT AND LOG \*

1a. TYPE OF WELL: OIL WELL ☒ GAS WELL ☐ DRY ☐  
b. TYPE OF COMPLETION: NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. ENVR. ☐ Other ☐  
2. NAME OF OPERATOR: MESA GRANDE RESOURCES, INC.  
3. ADDRESS OF OPERATOR: 1200 Philtower Building, Tulsa, Oklahoma 74103  
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements):  
At surface 1850' FWL & 1700' FNL  
At top prod. interval reported below  
At total depth 1850' FWL & 1700' FNL

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NOV 04 1985

BUREAU OF LAND MANAGEMENT  
FARMINGTON RESOURCE AREA

5. LEASE DESIGNATION AND SERIAL NO.

NM-04083

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME

Federal

9. WELL NO.

#1 Hellcat

10. FIELD AND POOL, OR PADCAT Gavilan Greenhorn

Gav Mancos/ Graneros/Dakota

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

22-25N-2W

12. COUNTY OR PARISH

Rio Arriba

13. STATE

New Mexico

15. DATE SPUDDED 9/26/85  
16. DATE T.D. REACHED 10/16/84  
17. DATE COMPL. (Ready to prod.) 10/19/85  
18. ELEVATIONS (DF, RKB, RT, GR, ETC.)\* 7215' GR  
19. ELEV. CASINGHEAD 7215' GR

20. TOTAL DEPTH, MD & TVD 8024'  
21. PLUG, BACK T.D., MD & TVD 7416'  
22. IF MULTIPLE COMPL., HOW MANY\* ---  
23. INTERVALS DRILLED BY ---  
24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)\*  
Upper Gallup - 38 holes, .34" diameter -- 6610-7104  
Lower Gallup - 23 holes, .34" diameter -- 7254-7395

ROTARY TOOLS  
CABLE TOOLS  
Surf.-T.D.

25. WAS DIRECTIONAL SURVEY MADE  
yes, attached

26. TYPE ELECTRIC AND OTHER LOGS RUN Long spaced sonic Cyberlook  
Induction-SFL/Formation Density-Compensated Neutron  
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
9 5/8"	36#	476'	12 1/4"	265 sx Class B	-0-
7"	23# + 26#	8002'	8 3/4"	3 staged (See attached #1)	-0-

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2 3/8"	6800	---

31. PERFORATION RECORD (Interval, size, and type)

See attached #1

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OIL CON. DIV.  
DIST. 9

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

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
See attached #1	

33.\* PRODUCTION

DATE FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump)				WELL STATUS (Producing or shut-in)	
10/21/85		Pumping Vulcan 320 w/120" Stroke				Testing	
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO
10/19/85	24	1/4"	→	149	200	24 load	1342:1
FLOW, TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)	
Pumping	136#	→	149	200	24 load	46	

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

Fuel 14 Mcf - vented balance

TEST WITNESSED BY

Ron Sorrow

35. LIST OF ATTACHMENTS

Attachment #1, Items 31 & 32

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

SIGNED

TITLE

DATE

\*(See Instructions and Spaces for Additional Data on Reverse Side)

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):

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	TOP	
					MEAS. DEPTH	TRUE VERT. DEPTH
3107	3242	Ojo Alamo - Water bearing sandstone	Ojo Alamo	3107	3107	
3242	3296	Kirkland - Shale	Kirkland	3242	3242	
3296	3385	Fruitland - Sandstone, Shale & Coal sequence, contains both water & gas in the sands.	Fruitland	3296	3296	
3385	3500	Pictured Cliffs - Gas bearing sandstones	Pictured Cliffs	3385	3385	
3500	5008	Lewis - Shale sequence	Lewis	3506	3506	
5008	5286	Cliff House - Water wet sandstone	Cliff House	5008	5008	
5286	5528	Menefee - Sandstone, shale & coal sequence, sandstones could contain one or any combination of oil, gas or water.	Menefee	5286	5286	
5528	5773	Point Lookout - Sandstone sequence containing oil & gas.	Point Lookout	5528	5528	
5773	6740	Mancos - Shale	Mancos	5773	5773	
6740	7283	Gallup - Sandstone, siltstone & shale - contains varying amounts of oil & gas	Gallup	6740	6740	
7283	7396	Sanostee - Siltstone - oil & gas bearing	Sanostee	7283	7283	
7396	7580	Carlile - Calcareous shale - oil & gas	Carlile	7396	7396	
7580	7655	Greenhorn - Limestone & shale - oil & gas	Greenhorn	7580	7580	
7655	7757	Graneros - Sandstone & shale - oil & gas bearing	Graneros	7655	7655	
7757	8024	Dakota - Sandstone & shale - oil, gas & water	Dakota	7757	7757	

38. GEOLOGIC MARKERS

ATTACHMENT TO FORM 3160-4  
#1

Lease Number: NM-04083  
Operator: MESA GRANDE RESOURCES, INC.  
Well: #1 FEDERAL HELLCAT

<u>#31 Perforation Record</u>	<u># Holes</u>	<u>Size</u>
Dakota: 7,800-847, 7,758-68	33	.48"
Graneros: 7,716-20, 7,667-93	17	.48"
Greenhorn: 7,634-46	12	.48"
Carlile: 7,501-69	19	.48"
Lower Gallup: 7,320-95, 7,249-81	23	.34"
Upper Gallup: 6,610-45, 6,706-76, 6,802-70, 6,924-98, 7,002-96, 7,100-04	38	.34"

#32 Acid, Shot, Fracture, Cement, Squeeze Record

7,634-7,847:	<u>Acidize:</u>	w/3,000 gals. 15% MSR acid & 2,000# RS (Diverter)
	<u>Frac'd:</u>	77,000 gals. foam KCL water 51,000# 20/40 sand
7,501-7,569:	Acidized	w/3,000 gals. 15% gelled acid
<u>PBTD</u> 7,416:	Baker Model "S" B.P. at 7,470' w/ 10 sx (11.8 c.f.) on top. Cement on top at 7,416 by wireline tested to 3,000#.	
7,249-7,395:	<u>Acidize:</u>	2,000 gals. 15% HCL
	<u>Frac'd:</u>	612 bbls. foamed 2% KCL water & 40,000# 20/40 sand w/68,000 10/20
6,610-7,104:	<u>Acidize:</u>	1,500 gals. 15% HCL
	<u>Frac'd:</u>	1,884 bbls. slick water 8,000# 20/40 & 65,000 10/20