

133938192

NSL

12/23/01



J.D. MURCHISON INTERESTS, INC.

November 30, 2001

MURCHISON OIL & GAS, INC.

MURCHISON PROPERTIES, INC.

Mr. Michael Stogner
State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
2040 South Pacheco
Santa Fe, NM. 87505

DEC - 3 2001

**RE: UNORTHODOX LOCATION EXCEPTION
NASH UNIT #52
SURFACE: 1628' FSL & 2150' FWL, SEC. 12, T23S, R29E
BHL @ TD: 838' FNL & 1958' FWL, UNIT C, SEC. 12, T23S, R29E
BHL @ ATOKA: 12956' 1045' FNL & 2015' FWL
EDDY CO., NM.**

Dear Mr. Stogner:

The referenced well was directionally drilled to the Morrow formation. The bottom hole location at Morrow depth was orthodox. However the Morrow completion was unsuccessful and the well has been completed in the Atoka formation as shown on the attached BLM Form 3160-4 completion report, but bottom hole location at the Atoka depths is unorthodox by virtue of Order R-11231. The BHL is more than 660' from all the outer boundaries of the Proration Unit so a list of offset operators has not been submitted.

For your convenience a copy of the survey plat, NM-Form C-102, the Sundry Notice Form 3160-5 for completion, and a plat of the Nash Unit have also been attached. This letter serves to request that an exception to the wells BHL location requirements of Rule 104 C (2) (b) be granted in view of these circumstances. Please contact me if you should have questions.

Sincerely,

MURCHISON OIL & GAS, INC.

Michael S. Daugherty
Vice President Operations

MSD/ct/Nash#52-UnorthLocExc.

Encl.

cc: Mr. Bryan Arrant-St. of New Mexico
Oil Conservation Division - District II
811 S. 1st Street
Artesia, NM. 88210-2834

DISTRICT I
P.O. Box 1980, Hobbs, NM 88241-1980

DISTRICT II
P.O. Drawer DD, Artesia, NM 88211-0719

DISTRICT III
1000 Rio Brazos Rd., Artesia, NM 87410

DISTRICT IV
P.O. Box 2088, Santa Fe, N.M. 87504-2088

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised February 10, 1994
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
		NASH DRAW MORROW
Property Code	Property Name	Well Number
	NASH	52
OGRID No.	Operator Name	Elevation
015363	MURCHISON OIL & GAS, INC.	2985

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	12	23 S	29 E		1628	SOUTH	2150	WEST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	12	23 S	29 E		660	NORTH	1980	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Michael S. Daugherty</i> Signature MICHAEL S. DAUGHERTY Printed Name VICE PRESIDENT OPERATIONS Title 7/21/00 Date</p> <p>SURVEYOR CERTIFICATION</p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision and that the same is true and correct to the best of my belief.</p> <p>JUNE 26, 2000</p> <p>Date Surveyed LMP Signature & Seal of Professional Surveyor Professional Surveyor NEW MEXICO 6/29/2000 00-11-0775</p> <p>Certificate No. RONALD Q. EIDSON 3239 CARY EIDSON 12641 PROF. MACON WEDONALD 12185</p>
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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE

OPERATOR'S COPY

FORM APPROVED
OMB NO. 1004-0137
Expires: February 28, 1995

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1a. TYPE OF WELL: OIL WELL <input type="checkbox"/> GAS WELL <input checked="" type="checkbox"/> DRY <input type="checkbox"/> Other _____		5. LEASE DESIGNATION AND SERIAL NO. NM 0556859-A					
b. TYPE OF COMPLETION: NEW WELL <input checked="" type="checkbox"/> WORK OVER <input type="checkbox"/> DEEP-EN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> DIFF. REVR. <input type="checkbox"/> Other _____		6. IF INDIAN, ALLOTTEE OR TRIBE NAME					
2. NAME OF OPERATOR MURCHISON OIL & GAS, INC.		7. UNIT AGREEMENT NAME NASH UNIT 8131					
3. ADDRESS AND TELEPHONE NO. 1100 MIRA VISTA BLVD. PLANO, TX. 75093-4698		8. FARM OR LEASE NAME, WELL NO. NASH UNIT #52					
4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)* At surface 1628' FSL & 2150' FWL SEC 12 T23S R29E At top prod. interval reported below ATOKA @ 12956' 1045' FNL & 2015' FWL At total depth 838' FNL & 1958' FWL		9. API WELL NO. 30-015-31510 0051					
14. PERMIT NO. _____ DATE ISSUED 12/5/00		10. FIELD AND POOL, OR WILDCAT NASH DRAW ATOKA					
15. DATE SPUDDED 5/29/01		11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA SEC 12 T23S R29E					
16. DATE T.D. REACHED 7/27/01		12. COUNTY OR PARISH EDDY					
17. DATE COMPL. (Ready to prod.) 9/6/01 (WOPL)		13. STATE NM					
18. ELEVATIONS (DF, RKB, RT, OR, ETC.)* 2985 GL		10. ELEV. CASINGHEAD 2985'					
20. TOTAL DEPTH, MD & TVD 13737 TVD 14432 MD		21. PLUG, BACK T.D., MD & TVD 14215'					
22. IF MULTIPLE COMPL., HOW MANY? N/A		23. INTERVALS DRILLED BY ROTARY TOOLS 14432'					
24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)* MD 13045-61 ATOKA BANK TVD 12369' MD 12956-69 ATOKA TVD 12287'		25. WAS DIRECTIONAL SURVEY MADE YES					
26. TYPE ELECTRIC AND OTHER LOGS RUN NEUTRON DENSITY GR LATEROLOG		27. WAS WELL CORRED NO					
28. CASING RECORD (Report all strings set in well)							
CASING SIZE/GRADE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	TOP OF CEMENT, CEMENTING RECORD	AMOUNT PULLED		
13-3/8 N-80	72 #/FT	390'	17-1/2"	355 SXS CIRC CEMENT TO SURF	N/A		
10-3/4 N-80J	55K55 44.22#/FT	3120'	12-1/4"	1010 SXS CIRC CEMENT TO SURF	N/A		
7-5/8 N-80P1	10 39&33.7#/FT	10830'	9-7/8"	2460 SXS TOC @ 3172'	N/A		
29. LINER RECORD				30. TUBING RECORD			
SIZE	TOP (MD)	BOTTOM (MD)	BACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
5-1/2"	10486'	14437'	416 SXS		2 7/8"	12837' MD	12797'
31. PERFORATION RECORD (Interval, size and number)				32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.			
13045-61 16' 32 HOLES				DEPTH INTERVAL (MD)			
12956-69 13' 78 HOLES				AMOUNT AND KIND OF MATERIAL USED			
				12956-13061 ACIDIZE W/ 4000 GAL 7.5% & 30% METHANOL			
33. PRODUCTION				34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)			
DATE FIRST PRODUCTION 9/6/01		PRODUCTION METHOD (Flowing, gas lift, pumping—size and type of pump) FLOWING		WELL STATUS (Producing or shut-in) SI			
DATE OF TEST 9/6/01	HOURS TESTED 18 HRS	CHOKER SIZE 20/64	PROD'N. FOR TEST PERIOD →	OIL—BBL. 0	GAS—MCF. 1500	WATER—BBL. 0	GAS-OIL RATIO 0
FLOW. TUBING PRESS. 800 PSI	CASING PRESSURE 0	CALCULATED 24-HOUR RATE →	OIL—BBL. 0	GAS—MCF. 2000	WATER—BBL. 0	OIL GRAVITY-API (CORR.) N/A	
35. LIST OF ATTACHMENTS FLARED				TEST WITNESSED BY TOMMY FOLSOM			
36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records				ACCEPTED FOR RECORD David R. Glass NOV 6 2001			
SIGNED Michael J. Daugherty		TITLE V. P. OPERATIONS DAVID R. GLASS PETROLEUM ENGINEER		DATE 11/1/01			

*(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.
ATOKA SAND	13956	13969	SAND & SHALE
ATOKA SAND	13045	13061	LIMESTONE
MIDDLE MORROW	13905	13930	SAND SHALE
LOW MORROW	14286	14310	SAND SHALE

38. GEOLOGIC MARKERS

NAME	TOP	
	MEAS. DEPTH	TRUE VERT. DEPTH
DELAWARE	3153	3152
BONE SPRING	6883	6882
WOLF CAMP	10532	10146
STRAWN	12626	12002
ATOKA MORROW	12762	12116
MORROW	13594	12904

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OPERATOR'S COPY

FORM APPROVED
OMB No. 1004-0133
Expires July 31, 1996

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other Instructions on reverse side

1. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. NM 0556859-A
2. Name of Operator MURCHISON OIL & GAS, INC.		6. If Indian, Allottee or Tribe Name
3a. Address 1100 MIRA VISTA BLVD. PLANO, TX. 75093-4698	3b. Phone No. (include area code) (972) 931-0700	7. If Unit or CA/Agreement, Name and/or No. NASH UNIT 8131
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) SURFACE: 1628 FSL & 2150 FWL UNIT K SEC 12 T23S R29E BHL: 660 FNL & 1980 FWL UNIT C SEC 12 T23S R29E		8. Well Name and No. NASH UNIT #52
		9. API Well No. 30-015-31510
		10. Field and Pool, or Exploratory Area NASH DRAW MORROW
		11. County or Parish, State EDDY COUNTY, NM.

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input checked="" type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other <u>PERFORATE</u>
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

PBTD @ 14215'. Run in hole with casing gun and perforate 13045-061' w/ 32 holes. TIH w/ 414 Jts. 2 7/8" 6.5 P110 Hydrill tubing and Arrow packer to 12797'. Set packer @ 12797' w/ bottom tubing @ 12837'. Flow well. Acidize w/ 2500 15% HCL and 2000 SCF N2. Flow well back. 18 HR SITP 1600 PSI. Kill well and perforate with a through tubing gun 12969-56' w/ 6 shot/ft. 78 holes. Acidize both intervals w/ 4000 gas 7.5% Morrow Acid and 14900 SCF. Flow well back and clean up. Flow over night. Flow after 18 HRS. 2000 MCFD on 20/64 CK @ 800 PSI. Shut well in and wait on BLM approval for pipeline to connect to sales. Well shut in on 9/6/01.

14. I hereby certify that the foregoing is true and correct Name (Printed/Typed) MICHAEL S. DAUGHERTY		Title VICE PRESIDENT OPERATIONS
Signature 		Date 10/31/01

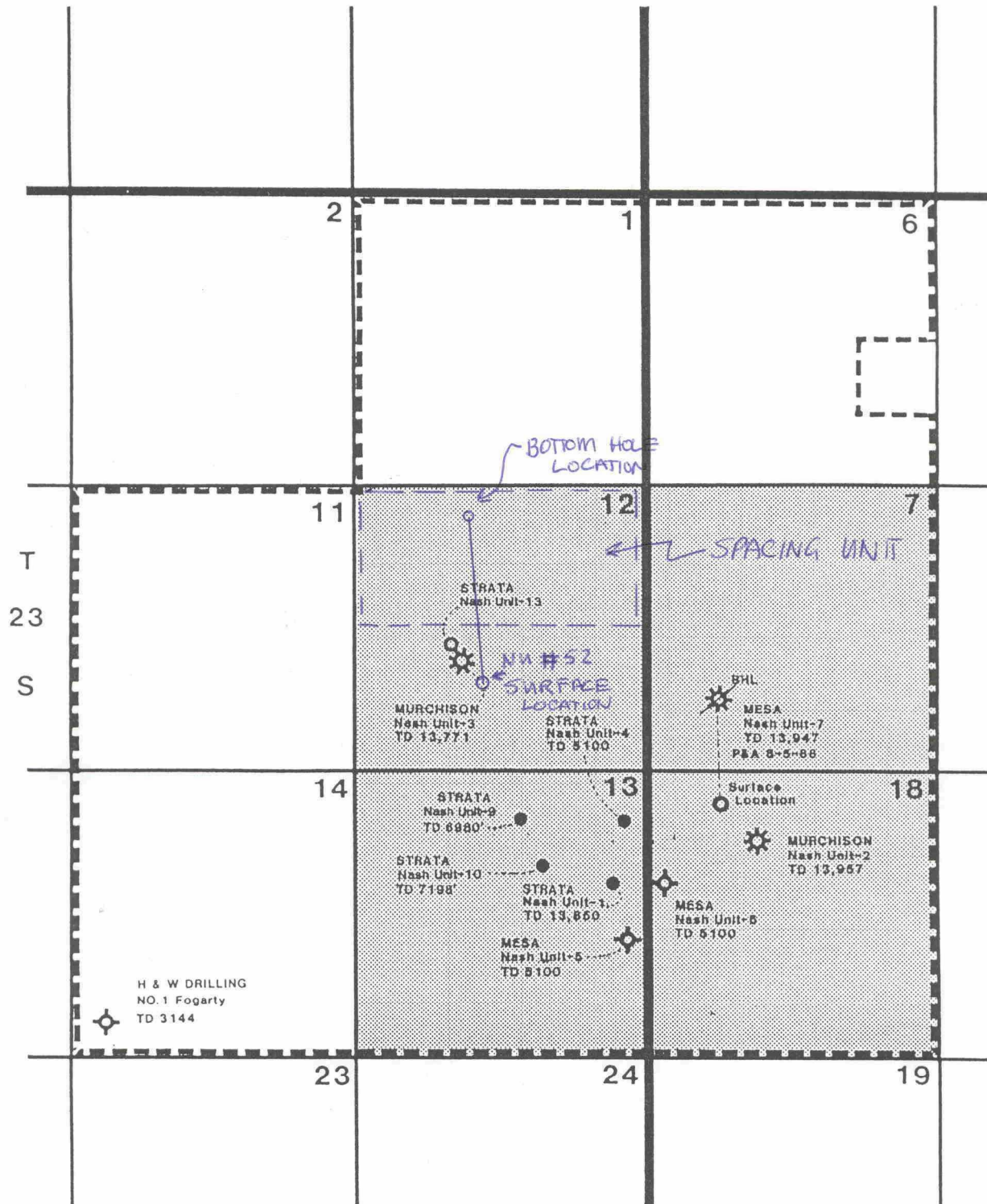
THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by	Title 	Office NOV 6 2001
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Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

R-29-E

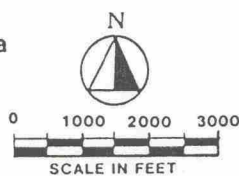
R-30-E



LEGEND

--- Nash Unit Outline

Atoka Participating Area



MURCHISON OIL & GAS, INC.

NASH UNIT
EDDY COUNTY, NEW MEXICO

Atoka Participating Area

Date:

Scale 1" = 2000'

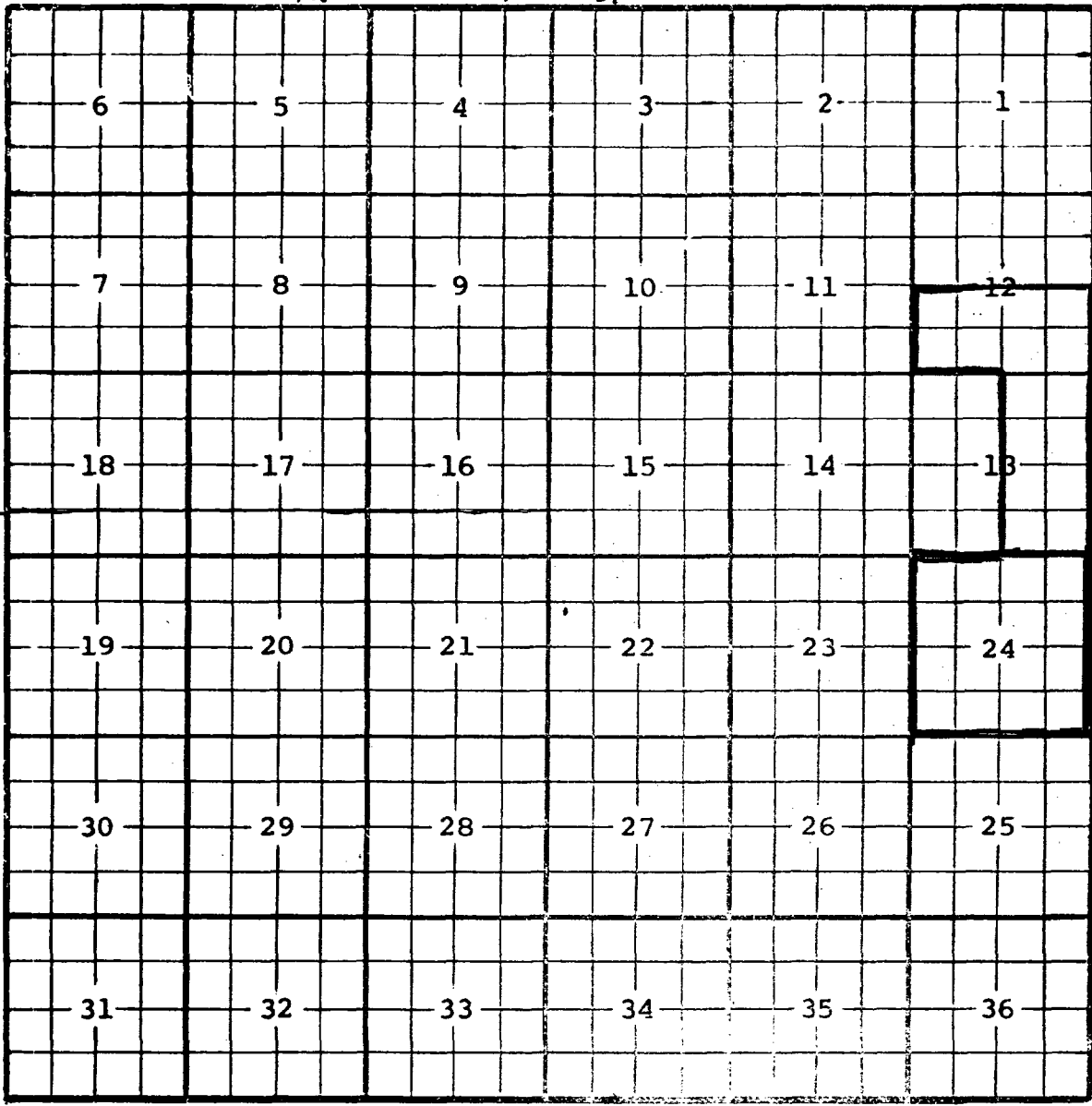
COUNTY *Eddy*

POOL *Nash Draw - Atoka Gas*

TOWNSHIP *23 South*

RANGE *29 East*

NMPM



Ext: 1/2 Sec 12, 1/2 Sec 13 (R-5361, 3-1-77)

Ext: All Sec. 24 (R-9545, 7-1-91)

COUNTY *Eddy*

POOL *Nash Draw - Atoka Gas*

TOWNSHIP *23 South* RANGE *30 East*

NMPM

6	5	4	3	2	1	
7	8	9	10	11	12	
18	17	16	15	14	13	
19	20	21	22	23	24	
30	29	28	27	26	25	
31	32	33	34	35	36	

Description: *N $\frac{1}{2}$ Sec 18 (R-5252, 9-1-76)*

CMD :
OG5SECT

ONGARD
INQUIRE LAND BY SECTION

01/03/02 08:58:
OGOMES -TP
PAGE NO:

Sec : 12 Twp : 23S Rng : 29E Section Type : NORMAL

D 40.00 Federal owned U R A	C 40.00 Federal owned U R A	B 40.00 Federal owned U R	A 40.00 Federal owned U R
E 40.00 Federal owned U R A	F 40.00 Federal owned U R	G 40.00 Federal owned U R	H 40.00 Federal owned U R

PF01 HELP	PF02	PF03 EXIT	PF04 GoTo	PF05	PF06
PF07 BKWD	PF08 FWD	PF09 PRINT	PF10 SDIV	PF11	PF12

CMD :
OG5SECT

ONGARD
INQUIRE LAND BY SECTION

01/03/02 08:58:
OGOMES -TP
PAGE NO:

Sec : 12 Twp : 23S Rng : 29E Section Type : NORMAL

L 40.00 Federal owned U R	K 40.00 Federal owned U R A A A	J 40.00 Federal owned U R A	I 40.00 Federal owned U R
M 40.00 Federal owned U R	N 40.00 Federal owned U R A	O 40.00 Federal owned U R A	P 40.00 CS K06600 0001 MCELVAIN OIL & U R 12/20/7 A

PF01 HELP	PF02	PF03 EXIT	PF04 GoTo	PF05	PF06
PF07 BKWD	PF08 FWD	PF09 PRINT	PF10 SDIV	PF11	PF12

CMD :
OG6IWCM

ONGARD
INQUIRE WELL COMPLETIONS

01/03/02 08:58:
OGOMES -TP

API Well No : 30 15 21781 Eff Date : 12-01-1976 WC Status : A
Pool Idn : 81560 NASH DRAW;ATOKA (GAS)
OGRID Idn : 15363 MURCHISON OIL & GAS INC
Prop Idn : 8131 NASH UNIT

Well No : 003
GL Elevation: 99999

	U/L	Sec	Township	Range	North/South	East/West	Prop/Act (P/
	---	---	-----	-----	-----	-----	-----
B.H. Locn : K	12	23S	29E	FTG 1980 F S	FTG 1980 F W		P

Lot Identifier:
Dedicated Acre: 320.00
Lease Type : F
Type of consolidation (Comm, Unit, Forced Pooling - C/U/F/O) :

M0025: Enter PF keys to scroll

PF01 HELP	PF02	PF03 EXIT	PF04 GoTo	PF05	PF06
PF07	PF08	PF09	PF10 NEXT-WC	PF11 HISTORY	PF12 NXTREC

CMD : ONGARD 01/03/02 08:58:
 OG6ACRE C102-DEDICATE ACREAGE OGOMES -TP
 Page No :

API Well No : 30 15 21781 Eff Date : 04-30-1991
 Pool Idn : 81560 NASH DRAW;ATOKA (GAS)
 Prop Idn : 8131 NASH UNIT Well No : 00
 Spacing Unit : 26969 OCD Order : Simultaneous Dedication:
 Sect/Twp/Rng : Acreage : 320.00 Revised C102? (Y/N) :
 Dedicated Land:

S	Base	U/L	Sec	Twp	Rng	Acreage	L/W	Ownership	Lot	Idn
I	12	23S	29E	40.00	N	FD				
J	12	23S	29E	40.00	N	FD				
K	12	23S	29E	40.00	N	FD				
L	12	23S	29E	40.00	N	FD				
M	12	23S	29E	40.00	N	FD				
N	12	23S	29E	40.00	N	FD				
O	12	23S	29E	40.00	N	FD				
P	12	23S	29E	40.00	N	ST				

E0005: Enter data to modify or PF keys to scroll

PF01 HELP PF02 PF03 EXIT PF04 GoTo PF05 PF06 CONFIRM
 PF07 BKWD PF08 FWD PF09 PF10 LAND PF11 NXTSEC PF12 RECONF

CMD : ONGARD 01/03/02 08:59:
OG6IWCM INQUIRE WELL COMPLETIONS OGOMES -TP

API Well No : 30 15 31510 Eff Date : 09-06-2001 WC Status : S
Pool Idn : 81560 NASH DRAW;ATOKA (GAS)
OGRID Idn : 15363 MURCHISON OIL & GAS INC
Prop Idn : 8131 NASH UNIT

Well No : 052
GL Elevation: 2985

	U/L	Sec	Township	Range	North/South	East/West	Prop/Act (P/
	---	---	-----	-----	-----	-----	-----
B.H. Locn	: C	12	23S	29E	FTG 1628 F S	FTG 2150 F W	P
Lot Identifier:							
Dedicated Acre: 320.00							
Lease Type : F							
Type of consolidation (Comm, Unit, Forced Pooling - C/U/F/O) :							

E6317: No more recs. for this api well no.

PF01 HELP	PF02	PF03 EXIT	PF04 GoTo	PF05	PF06
PF07	PF08	PF09	PF10 NEXT-WC	PF11 HISTORY	PF12 NXTREC

CMD : ONGARD 01/03/02 09:00:
OG6ACRE C102-DEDICATE ACREAGE OGOMES -TP
Page No :

API Well No : 30 15 31510 Eff Date : 09-06-2001
Pool Idn : 81560 NASH DRAW;ATOKA (GAS)
Prop Idn : 8131 NASH UNIT Well No : 05
Spacing Unit : 55377 OCD Order : Simultaneous Dedication:
Sect/Twp/Rng : Acreage : 320.00 Revised C102? (Y/N) :
Dedicated Land:

S	Base	U/L	Sec	Twp	Rng	Acreage	L/W	Ownership	Lot	Idn
	A	12		23S	29E	40.00	N	FD		
	B	12		23S	29E	40.00	N	FD		
	C	12		23S	29E	40.00	N	FD		
	D	12		23S	29E	40.00	N	FD		
	E	12		23S	29E	40.00	N	FD		
	F	12		23S	29E	40.00	N	FD		
	G	12		23S	29E	40.00	N	FD		
	H	12		23S	29E	40.00	N	FD		

E0005: Enter data to modify or PF keys to scroll

PF01 HELP	PF02	PF03 EXIT	PF04 GoTo	PF05	PF06 CONFIRM
PF07 BKWD	PF08 FWD	PF09	PF10 LAND	PF11 NXTSEC	PF12 RECONF

NASH UNIT AREA

No. 14-08-0001-14168

APPROVED: July 25, 1974

EFFECTIVE: July 25, 1974


EXPLORATORY

Eddy County, New Mexico

gulram, inc.
petroleum engineering and government regulation consultants



Federal Lands	4,842.40 acres
State Lands	240.46 acres
Fee Lands	<u>40.00</u> acres
Total	5,122.86 acres

 - Lands subject to Automatic Elimination January 25, 1985
(not officially approved)

Remaining Unit Land - Federal	2,320.86 acres
State	<u>240.46</u> acres
Total	2,561.32 acres

Unit Name: Nash

Contract Number: 14-08-0001-14168

Automatic Elimination Date: January 25, 1985 (not approved officially)

Operator: Mesa Petroleum Company

PARTICIPATING AREAS (PA)

Name: Initial Delaware (Cherry Canyon)

Well Name: Nash Unit No. 4

Location: NE $\frac{1}{4}$ NE $\frac{1}{4}$ Sec. 13, T. 23 S., R. 29 E.

Legal PA Description: NE $\frac{1}{4}$ Sec. 13, T. 23 S., R. 29 E.

Effective Date: June 22, 1976

PA Total Acres: 160.00



Unit Name: Nash

Contract Number: 14-08-0001-14168

Automatic Elimination Date: January 25, 1985 (not approved officially)

Operator: Mesa Petroleum Company

PARTICIPATING AREAS (PA)

Name: Initial Atoka

Well Name: Nash Unit No. 2

Location: SE $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 18, T. 23 S., R. 30 E.

Legal PA Description: Lots 1,2,3,4,E $\frac{1}{2}$ W $\frac{1}{2}$, E $\frac{1}{2}$ Sec. 18, T. 23 S., R. 30 E.

Effective Date: April 21, 1976

PA Total Acres: 640.84

Name: 1st Revision Atoka

Well Name: Nash Unit No. 3

Location: NE $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 12, T. 23 S., R. 29 E.

Legal PA Description: All Sec. 12, All Sec. 13, T. 23 S., R. 29 E., Lots 1,2,3,4,
E $\frac{1}{2}$ W $\frac{1}{2}$, E $\frac{1}{2}$ Sec. 7, T. 23 S., R. 30 E. - 1920.48 acres

Effective Date: October 1, 1976

PA Total Acres: 2,561.32



Unit Name: Nash

Contract Number: 14-08-0001-14168

Automatic Elimination Date: January 25, 1985 (not approved officially)

Operator: Mesa Petroleum Company

PARTICIPATING AREAS (PA)

Name: Initial Morrow

Well Name: Nash Unit No. 1

Location: SE $\frac{1}{4}$ NE $\frac{1}{4}$ Sec. 13, T. 23 S., R. 29 E.

Legal PA Description: All Sec. 13, T. 23 S., R. 29 E., Lots 1,2,3,4, E $\frac{1}{2}$ W $\frac{1}{2}$,
E $\frac{1}{2}$ Sec. 18, T. 23 S., R. 30 E.

Effective Date: January 22, 1975

PA Total Acres: 1,280.84

Name: 1st Revision Morrow

Well Name: Nash Unit No. 7

Location: SW $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 7, T. 23 S., R. 30 E.

Legal PA Description: Lots 1,2,3,4, E $\frac{1}{2}$ W $\frac{1}{2}$, E $\frac{1}{2}$ Sec. 7, T. 23 S., R. 30 E. -
640.48 acres

Effective Date: July 1, 1980

PA Total Acres: 1,921.32



Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Oil Cons.

N.M. Div-Dist. 2

FORM APPROVED
OMB No. 1004-0135
Expires July 31, 1996

51

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

1301 W. Grand Avenue
Artesia, NM 88210

Lease Serial No.

MM 0556859-A

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE - Other Instructions on reverse side

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

MURCHISON OIL & GAS, INC. /

3a. Address 1100 MIRA VISTA BLVD.
PLANO, TX. 75093-4698

3b. Phone No. (include area code)
(972) 931-0700

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

SURFACE: 1628 FSL & 2150 FWL UNIT K SEC 12 T23S R29E

BHL: 660 FNL & 1980 FWL UNIT C SEC 12 T23S R29E

7. If Unit or CA/Agreement, Name and/or No.

NASH UNIT 8131

8. Well Name and No.

NASH UNIT #52

9. API Well No.

30-015-31510

10. Field and Pool, or Exploratory Area

NASH DRAW MORROW

11. County or Parish, State

EDDY COUNTY, NM.

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

TYPE OF ACTION

☐ Notice of Intent

☐ Subsequent Report

☐ Final Abandonment Notice

☐ Acidize

☐ Alter Casing

☐ Casing Repair

☐ Change Plans

☐ Convert to Injection

☐ Deepen

☐ Fracture Treat

☐ New Construction

☐ Plug and Abandon

☐ Plug Back

☐ Production (Start/Resume)

☐ Reclamation

☐ Recomplete

☐ Temporarily Abandon

☐ Water Disposal

☐ Water Shut-Off

☐ Well Integrity

☒ Other PIPELINE TAP

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed and testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Murchison Oil & Gas proposes to allow Duke Energy Field Services to install one gas line and lay 4,287 feet of 4 inch steel extension line to the Nash Draw Unit #52 and set one sales meter at the wellpad. This installation is inside the Unit boundaries and along an existing right of way. The pipeline extension is a buried 4" low pressure line.

Attached are plats of the well location, meter locations and pipeline.

APPROVED

SEP 25 2001

GARY GOURLEY
PETROLEUM ENGINEER

VICE PRESIDENT OPERATIONS

14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed)

MICHAEL S. DAUGHERTY

Signature

Michael S. Daugherty

Date

9/12/01

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date

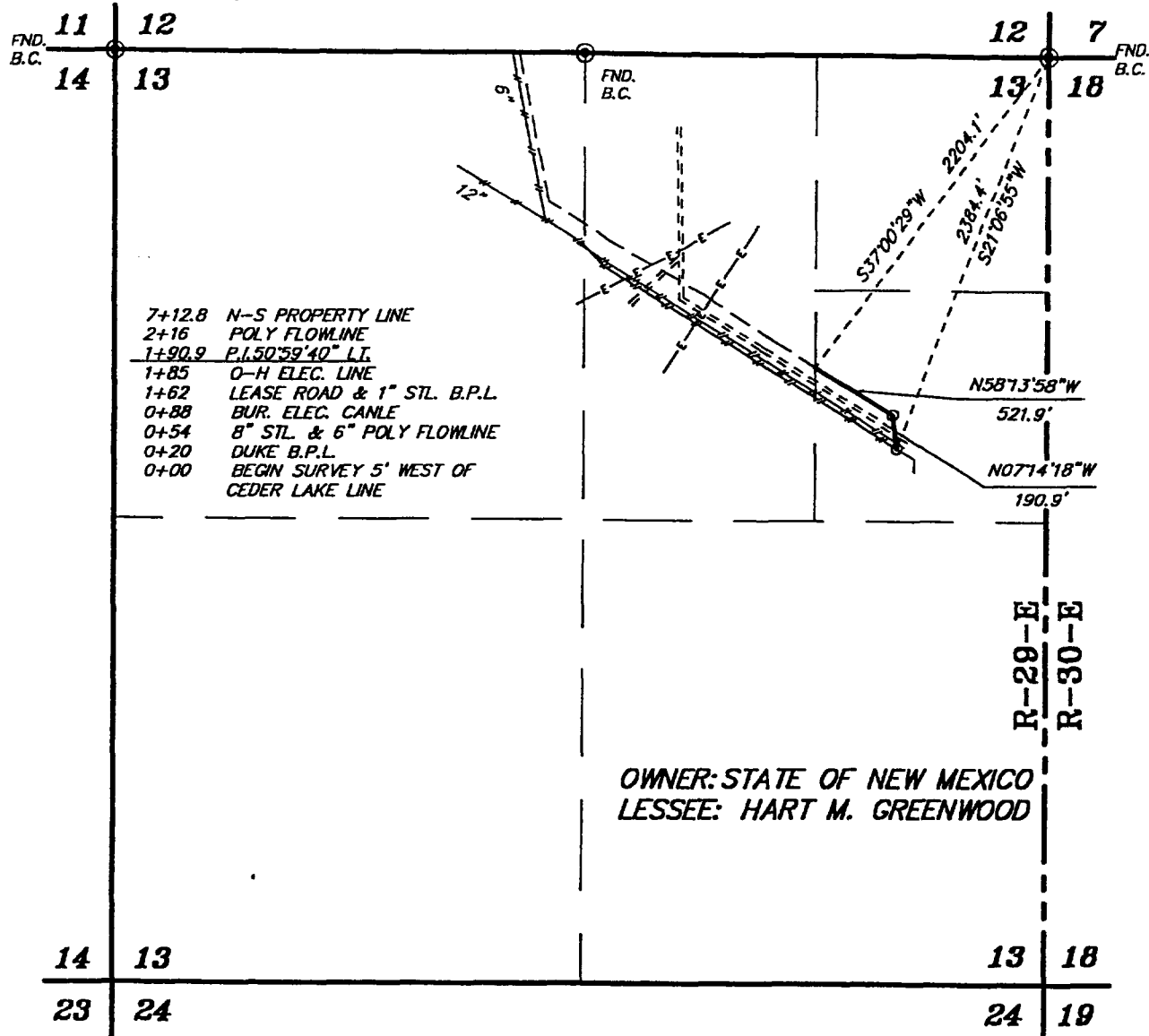
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

MURCHISON OIL & GAS INC., NASH UNIT #52

LINE No. _____

DISTRICT WEST PERMIAN PLANT OR STATION EAST CARLSBAD JOB OR AFE No. 100102236
 SECTION 13 TOWNSHIP 23 S RANGE 29 E SURVEY N.M.P.M. COUNTY EDDY STATE N.M.
 STUDY No. 2001ECB010



SCALE: 1" = 1000'

LEGAL DESCRIPTION☒ STAKING ☐ RESURVEY

A STRIP OF LAND 30.0 FEET WIDE, LOCATED IN SECTION 13, TOWNSHIP 23 SOUTH, RANGE 29 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO AND BEING 15.0 FEET LEFT AND RIGHT OF THE FOLLOWING DESCRIBED CENTERLINE SURVEY.

BEGINNING AT A POINT WHICH LIES S.21°06'55"W., 2384.4 FEET FROM THE NORTHEAST CORNER OF SAID SECTION 13; THENCE N.07°14'18"W., 190.9 FEET; THENCE N.58°13'58"W., 521.9 FEET TO A POINT ON THE WEST PROPERTY LINE WHICH LIES S.37°00'29"W., 2204.1 FEET FROM THE NORTHEAST CORNER OF SAID SECTION 13. SAID STRIP OF LAND BEING 712.8 FEET OR 43.20 RODS IN LENGTH AND CONTAINING 0.49 ACRES, MORE OR LESS, AND BEING ALLOCATED BY FORTIES AS FOLLOWS.

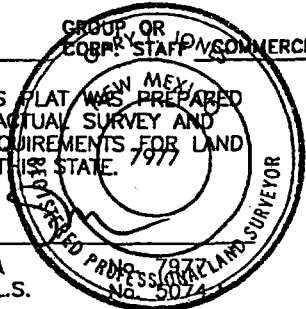
SE/4 NE/4 43.20 RODS OR 0.49 ACRES

SIGNED

GROUP OR
CORP. STAFF / COMMERCIAL

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED FROM FIELD NOTES OF AN ACTUAL SURVEY AND MEETS OR EXCEEDS ALL REQUIREMENTS FOR LAND SURVEYS AS SPECIFIED BY THIS STATE.

GARY L. JONES, N.M. P.S.
TEXAS P.L.S.



PTRE&C No.: EDDY 2112

BASIN SURVEYS

P.O. BOX 1786 - HOBBS, NEW MEXICO
W.O. Number: 1757 JLP #1- DUK1757

SEP 10 2001

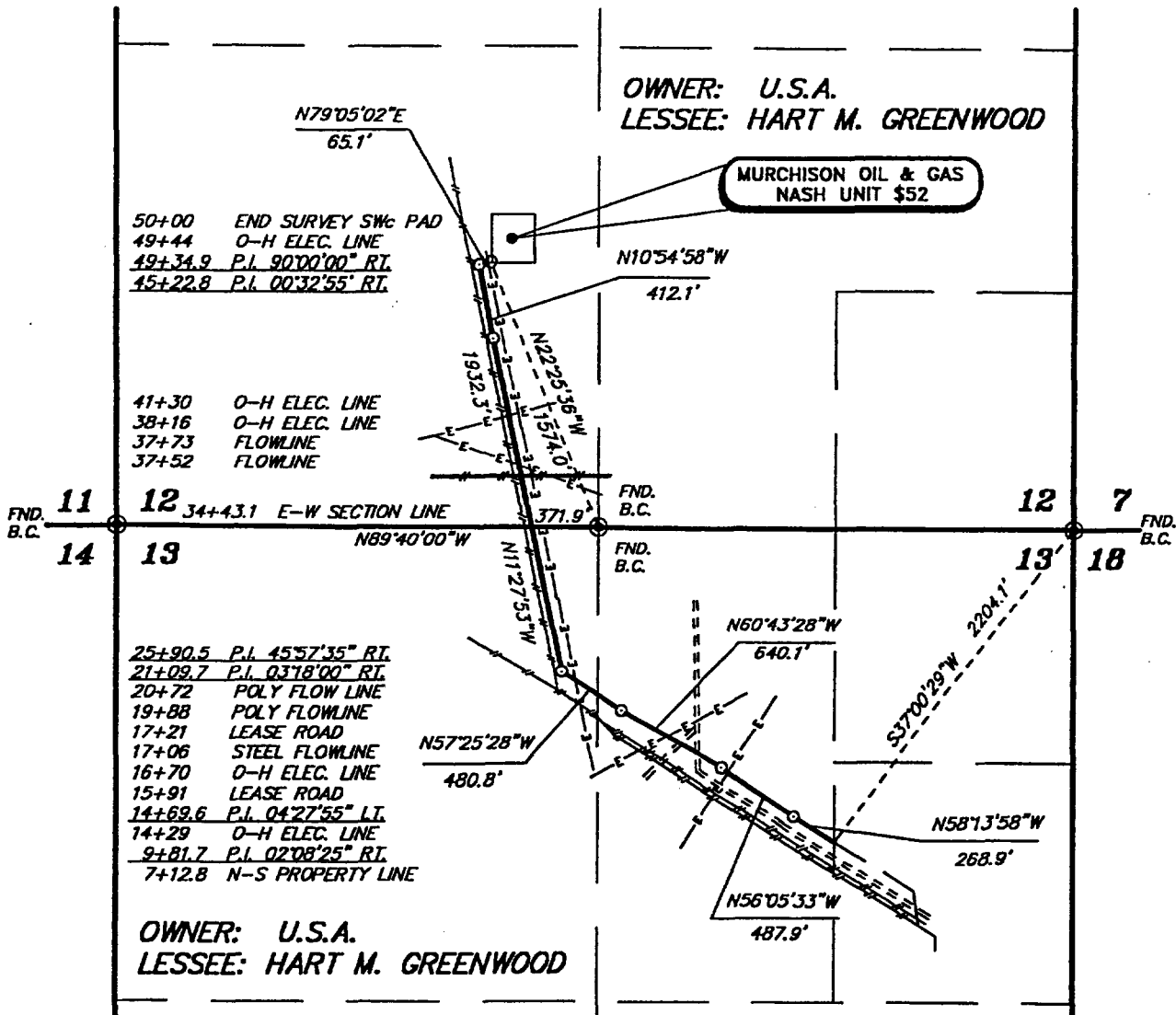
OF WORK
SURVEY A 4"x0.188" STEEL PIPELINE TO CONNECT THE

DATE: 08/24/01

MURCHISON OIL & GAS INC., NASH UNIT #52

LINE No. _____

DISTRICT WEST PERMIAN PLANT OR STATION EAST CARLSBAD JOB OR AFE No. 100102236
SECTION 12&13 TOWNSHIP 23 S RANGE 29 E SURVEY N.M.P.M. COUNTY EDDY STATE N.M.
STUDY No. 2001ECB010



SCALE: 1" = 1000'

☒ STAKING ☐ RESURVEY

LEGAL DESCRIPTION

A STRIP OF LAND 50.0 FEET WIDE, LOCATED IN SECTION 12&13, TOWNSHIP 23 SOUTH, RANGE 29 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO AND BEING 25.0 FEET LEFT AND RIGHT OF THE ABOVE PLATTED CENTERLINE SURVEY.

4287.2 FEET = 259.83 RODS = 0.81 MILES

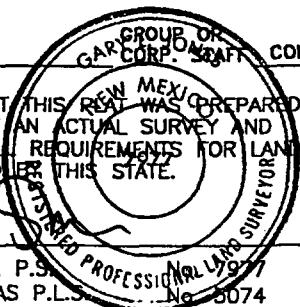
SIGNED

I HEREBY CERTIFY THAT THIS MAP WAS PREPARED FROM FIELD NOTES OF AN ACTUAL SURVEY AND MEETS OR EXCEEDS ALL REQUIREMENTS FOR LAND SURVEYS AS SPECIFIED IN THIS STATE.

GARY L. JONES

N.M. P.S.

TEXAS P.L.S.



COMMERCIAL

PTRE&C No.: EDDY 2112

BASIN SURVEYS

P.O. BOX 1786 - HOBBS, NEW MEXICO
W.O. Number: 1757 JLP #1- DUK1757

SEP 10 2001

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Oil Cons.
N.M. DIV-Dist. 2
1301 W. Grand Avenue
Artesia, NM 88210
Form Approved
OMB No. 1004-0135
Expires July 31, 1996
57
Bureau No.
00556859-A

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other Instructions on reverse side

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator
MURCHISON OIL & GAS, INC.

3a. Address 1100 MIRA VISTA BLVD.
PLANO, TX. 75093-4698

3b. Phone No. (include area code)
(972) 931-8000

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
SURFACE: 1628 FSL & 2150 FWL UNIT K SEC 12 T23S R29E
BHL: 660 FNL & 1980 FWL UNIT C SEC 12 T23S R29E

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.
NASH UNIT 8131

8. Well Name and No.
NASH UNIT #52

9. API Well No.
30-015-31510

10. Field and Pool, or Exploratory Area
NASH DRAW MORROW

11. County or Parish, State
EDDY COUNTY, NM.

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other <u>RUN CASING</u>
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	<u>AND CEMENT</u>
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zone. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 day following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Drill 9 7/8" hole to a measured depth of 10830' (TVD 10405'). POH with drill string. Pick up and run 281 jts. of 7 5/8" casing as follows:

BOTTOM:	104 JTS.	7 5/8"	39 #/FT	N-80	LT&C
	21 JTS.	7 5/8"	33.7 #/FT	N-80	LT&C
	DV TOOL	@ 6181'	FROM SURFACE		
	50 JTS.	7 5/8"	33.7 #/FT	N-80	LT&C
	106 JTS.	7 5/8"	33.7 #/FT	P-110	LT&C

Pump 890 SXS of 35:65 Class H + 5% D4 + 6% D20 + .3% D167 + .2% D65 + .2% D46 followed by 200 SXS Class H + .3% D167 + .1% D13. Drop DV Tool opening device and circulate between stages. Cement 2nd stage w/ 1270 SXS 35:65 Class H + 5% D4 + 6% D20 + .3% D167 + .2% D65 + .2% D46 followed by 100 SXS Class H Neat. Lost circulation on second stage. Run temperature survey and determined TOC @ 3172'. Nipple down stacks, set slips, cut off casing, nipple up tubing head and test to 6250 psi. Nipple up BOP, choke manifold, and change out BOP rams. Test BOP, choke manifold and safety valves to 10,000 PSI. WOC 36 Hrs. Drill out DV tool and float collar. Test casing to 2500 psi. Drill out shoe. Trip out with bit and pick up motor and MWD tools. Resume drilling 6 1/2" hole.

14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed)

MICHAEL S. DAUGHERTY

Signature

Title

VICE PRESIDENT OPERATIONS

Date

7/30/01

ACCEPTED FOR RECORD

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

DAVID R. GLASS

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

DAVID R. GLASS

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Oil Cons.
N.M. Div-Dist. 2
1301 W. Grand Avenue
Artesia, NM 88210
FORM APPROVED
OMB No. 1004-0135
Expires July 31, 1996
Lease Serial No.
56859-A

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other Instructions on reverse side

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator
MURCHISON OIL & GAS, INC.

3a. Address 1100 MIRA VISTA BLVD.
PLANO, TX. 75093-4698

3b. Phone No. (include area code)
(972) 981-0000

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
SURFACE: 1628 FSL & 2150 FWL UNIT K SEC 12 T23S R29E
BHL: 660 FNL & 1980 FWL UNIT C SEC 12 T23S R29E

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.
NASH UNIT 8131

8. Well Name and No.
NASH UNIT #52

9. API Well No.
30-015-31510

10. Field and Pool, or Exploratory Area
NASH DRAW MORROW

11. County or Parish, State
EDDY COUNTY, NM.

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other RUN LINER
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	AND CEMENT
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zone. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 day following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Drill 6 1/2" hole to a measured depth of 14,432' (TVD of 13,737"). Bottom hole location is 838' FNL and 1958' FWL, Sec. 12, T23S, R29E. POH with drill string and run 5 1/2" liner as follows:

				Length	Measured Depth
BOTTOM:	Float shoe			3'	14,437
	1 JT 23 #/FT	P-110	FL4S	38'	14,434
	Float collar			1'	14,396
	1 JT 23 #/FT	P-110	FL4S	39'	14,395
	1 Landing collar			1'	14,356
TOP:	101 JT 23 #/FT	P-110	FL4S	3843'	14,355
	1 Liner hanger			26'	10,512
					10,486

Cement with 416 SX of Cemcrete Blend 45/55 D961/D166 + .7 gpsb D600 + .05 gpsb D135 + .05 gpsb D47 + .4% D65 + .1% D800. Displaced w/ fresh water and mud. Liner hanger and packer set had full returns during cementing. Did not bump plug, float held. WOC 13 Hrs. Trip in hole. Did not find cement at liner top. Rig down and release rig @ 3:00 AM 7/27/01.

14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed) MICHAEL S. DAUGHERTY

Signature *Michael S. Daugherty*

Title VICE PRESIDENT OPERATIONS

Date 7/30/01

ACCEPTED FOR RECORD SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by (ORIG. SGD.) DAVID R. GLASS

Signature *David R. Glass*

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001 makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations or to furnish any false, fictitious or fraudulent information in any matter within its jurisdiction.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

N.M. Oil Cons. Division
811 S. 1st Street
Artesia, NM 88210-2834
FORM APPROVED
OMB NO. 1004-0135
Expires July 31, 1996
517

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other Instructions on reverse side

1. Type of Well <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other		6. If Indian, Allottee or Tribe Name
2. Name of Operator MURCHISON OIL & GAS, INC.		7. If Unit or C/A Agreement, Name and/or No. NASH UNIT 8131
3a. Address 1100 MIRA VISTA BLVD. PLANO, TX. 75093-4698	3b. Phone No. (include area code) (972) 931-0700	8. Well Name and No. NASH UNIT #52
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) SURFACE: 1628 FSL & 2150 FWL UNIT K SEC 12 T23S R29E BHL: 660 FNL & 1980 FWL UNIT C SEC 12 T23S R29E		9. API Well No. 30-015-31510
		10. Field and Pool, or Exploratory Area NASH DRAW MORROW
		11. County or Parish, State EDDY COUNTY, NM.

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other RUN AND CEMENT
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	FIRST INTERMEDIATE
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	CASING

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomple horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zone. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/MIA. Required subsequent reports shall be filed within 30 day following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Drill 12-1/4" hole to 3120'. Run casing as follows:

39 Jts	10-3/4"	44.22 #/ft	J-55	STL	Bottom
11 Jts	10-3/4"	44.22 #/ft	K-55	STL	
12 Jts	10-3/4"	44.22 #/ft	L-80	STL	
13 Jts	10-3/4"	44.22 #/ft	N-80	STL	Top

Cement with 880 SXS 35:65 POZ Class C + 10% D44 + 6% D20 + .2% D46 followed by 130 SXS Class "C" Neat. Circulate with full returns during job and circulated 285 SX to surface. Shut-in cement head and waited on cement 4 hrs. No flow back. Nipple down BOP. Could not set slips. Cut off 13-3/8" wellhead. Nipple down spacer spool and remove surface head. Weld on 10-3/4" wellhead. Test wellhead to 1000 psi. Nipple up BOP and choke manifold. Test BOP to 5000 psi. GIH with 9-7/8" bit. WOC a total of 33 hrs. Drill out cement and resume drilling open hole.

14. I hereby certify that the foregoing is true and correct Name (Printed/Typed) MICHAEL S. DAUGHERTY		Title VICE PRESIDENT OPERATIONS
Signature <i>Michael S. Daugherty</i>		Date 6/8/01

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by (ORIG. SGD.) DAVID P. GLASS JUL 13 2001	Title Office	Date
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Title 18 U.S.C. Section 1001 makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
BUREAU OF LAND MANAGEMENT
BLM-104-0135
Effective July 31, 1996

SUNDRY NOTICES AND REPORTS ON WELLS

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N.M. Oil Cons. Division
811 S. 1st Street
Artesia, NM 88210-2834

SUBMIT IN TRIPLICATE - Other Instructions on reverse side

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator
MURCHISON OIL & GAS, INC.

3a. Address 1100 MIRA VISTA BLVD.
PLANO, TX. 75093-4698

3b. Phone No. (include area code)
(972) 931-0700

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
SURFACE: 1628 FSL & 2150 FWL UNIT K SEC 12 T23S R29E
BHL: 660 FNL & 1980 FWL UNIT C SEC 12 T23S R29E

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

NASH UNIT 8131

8. Well Name and No.

NASH UNIT #52

9. API Well No.

30-015-31510

10. Field and Pool, or Exploratory Area

NASH DRAW MORROW

11. County or Parish, State

EDDY COUNTY, NM.

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input checked="" type="checkbox"/> Other <u>SPUD WELL</u>
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	<u>RUN SURFACE CASIN</u>
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	<u>& CEMENT</u>

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Spud well 5/29/01 and drill 17-1/2" hole to 390'. Run 11 joints of 13-3/8" 72 #/FT N-80 BTC casing to 390'. Cement with 155 SXS of 35:65 POZ Class "C" + 6% D20 + 2% S1 + .25 #/SX D29 followed by 200 SX of Class "C" + 2% S1 + .25 #/SX D29. Full returns during cement job, bumped plug, float held, and circulated 62 SXS to surface. Cut off conductor pipe and casing and weld on casinghead. Test head to 1000 psi nipple up BOP and choke manifold. Test casing, blind rams and choke manifold to 1000 psi. Trip in hole with 12-1/4 bit. WOC a total of 34 hrs. Drill cement and shoe and resume drilling open hole.

14. I hereby certify that the foregoing is true and correct
Name (Printed/Typed)

MICHAEL S. DAUGHERTY

Title

VICE PRESIDENT OPERATIONS

Signature

Date

6/8/01

ACCEPTED FOR RECORD

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

(ORIG. SGD.) DAVID R. GLASS

Title

Date

Conditions of approval, if any, are hereby approved of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Title 18 U.S.C. Section 1001 prohibits any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations or to any matter within its jurisdiction.

Bureau of Land Management
ReceivedUNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

JUL 25 2000

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

1a. Proposed Field Office
Carlsbad, NMDEEPEN ☐

b. TYPE OF WELL

OIL WELL ☐GAS WELL ☒

OTHER

SINGLE ZONE ☐MULTIPLE ZONE ☒

2. NAME OF OPERATOR

MURCHISON OIL & GAS, INC.

3. ADDRESS AND TELEPHONE NO.

1445 ROSS AVE., STE. 5300, LB 152, DALLAS, TX. 75202-2883

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

At surface

1628' FSL & 2150' FWL UNIT K

At proposed prod. zone

660' FNL & 1980 FWL UNIT C

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

17 MILES SOUTHEAST OF CARLSBAD

10. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST

PROPERTY OR LEASE LINE, FT.

(Also to nearest drilg. unit line, if any)

660' BHL

18. DISTANCE FROM PROPOSED LOCATION*

TO NEAREST WELL, DRILLING, COMPLETED,

OR APPLIED FOR, ON THIS LEASE, FT.

2640' BHL

16. NO. OF ACRES IN LEASE

320

19. PROPOSED DEPTH

14000 TVD

17. NO. OF ACRES ASSIGNED

TO THIS WELL

320 N/2

20. ROTARY OR CABLE TOOLS

ROTARY

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

2985 GL

22. APPROX. DATE WORK WILL START*

9/15/00

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17 1/2"	13 3/8" H-55	68	350'	420 SXS - CIRCULATE
12 1/4"	9 5/8" J-55	36	3100'	1000 SXS - CIRCULATE
8 3/4"	7 5/8" N-80, S-95	33.7	10330' TVD 10600' MD	1500 SXS
6 1/2"	5 1/2" N-80	20 #/F	10000 - 14000 TVD 10300 - 14600 MD	

IT IS PROPOSED TO DRILL THIS WELL TO A TD OF 14,000 TVD AND 14,600' MD AND TEST THE MORROW FORMATION, THE BLOWOUT PREVENTION PROGRAM IS AS FOLLOWS:

- 1) ONE SET OF DRILL PIPE RAMS (5M)
- 2) ONE SET OF BLIND RAMS (5M)
- 3) ONE SET OF HYDRIL (3M)

R-III-P

Notify OCD spud & time to witness
cementing of ALL CASING STRINGS

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout prevention program, if any.

24.

SIGNED

TITLE VICE PRESIDENT OPERATIONS

DATE

7/21/00

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

CONDITIONS OF APPROVAL, IF ANY:

APPROVED BY

TITLE

Assoc STATE Dir

DATE

12-15-00

*See Instructions On Reverse Side

DISTRICT I
P.O. Box 1980, Hobbs, NM 88241-1980

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised February 10, 1994
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

DISTRICT II
P.O. Drawer 22, Artesia, NM 88211-0719

DISTRICT III
1000 Rio Brasos Rd., Aztec, NM 87410

DISTRICT IV
P.O. BOX 2088, SANTA FE, N.M. 87504-2088

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name
		NASH DRAW MORROW
Property Code	Property Name	Well Number
	NASH	52
OGRID No.	Operator Name	Elevation
015363	MURCHISON OIL & GAS, INC.	2985

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	12	23 S	29 E		1628	SOUTH	2150	WEST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	12	23 S	29 E		660	NORTH	1980	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
320			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

	<p>OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Michael S. Daugherty</i> Signature</p> <p>MICHAEL S. DAUGHERTY Printed Name</p> <p>VICE PRESIDENT OPERATIONS Title</p> <p>7/21/00 Date</p>
	<p>SURVEYOR CERTIFICATION</p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision and that the same is true and correct to the best of my belief.</p> <p>JUNE 26, 2000</p> <p>Date Surveyed</p> <p><i>Gary E. Edson</i> Signature & Seal of Professional Surveyor</p> <p>GARY E. EDSON NEW MEXICO 6/29/2000 00-11-0775</p> <p>Certificate No. RONALD G. EDSON 3239 GARY E. EDSON 12641 MACON, McDONALD 12185</p>

July 21, 2000

United States Department of the Interior
Bureau of Land Management
Roswell District Office
2909 West Second Street
Roswell, New Mexico 88201
Attn: Linda Askawik

**Re: Application for Permit to Drill
Murchison Oil & Gas, Inc.
Nash Unit #52
Eddy County, New Mexico
Lease No. NM-0556859-A**

Gentlemen:

Murchison Oil & Gas, Inc. "MOGI" respectfully requests permission to drill our Nash Unit #52 with a surface location at 1628' FSL and 2150' FWL, and a bottom hole location at 660' FNL and 1980' FWL of Section 34, T24S, R26E, Eddy County, New Mexico, Federal Lease No. NM-0556859-A. The proposed well will be drilled to a TD of approximately 14,000' (TVD) and 14,600' MD. The location and work area have been staked. It is approximately 17 miles South East of Carlsbad, New Mexico.

In accordance with requirements stipulated in Federal Onshore Oil and Gas Order No. 1 under 43 CFR 3162.1, our Application for Permission to Drill and supporting evidence is hereby submitted.

I. Application for Permit to Drill:

1. Form 3160-3, Application for Permit to Drill.
2. Form C-102 Location and Acreage Dedication Plat certified by Gary Eidson Registered Land Surveyor No. 12641 in the State of New Mexico, dated 6/26/2000.
3. The elevation of the unprepared ground is 2985 feet above sea level.
4. The geologic name of the surface formation is Permian.
5. Rotary drilling equipment will be utilized to drill the well to a measured depth of 14,600', and run casing. This equipment will then be rigged down and the well will be completed with a pulling unit.
6. Proposed total depth is 14,000' TVD.

7. Estimated tops of important geologic markers.

Lamar	3070' TVD
Delaware	3140' TVD
Cherry Canyon	4170' TVD
Bone Springs	6865' TVD
3 rd BS SS	9786' TVD
Wolfcamp	10139' TVD
Strawn	12025' TVD
Atoka	12147' TVD
Morrow	12918' TVD

8. Estimated depths at which anticipated water, oil, gas or other mineral bearing formations are expected to be encountered:

Primary Objective:	Morrow	12918' TVD
Secondary Objectives:	Strawn	12025' TVD
	Atoka	12147' TVD

9. The proposed casing program is as follows:

Surface: 13-3/8" OD 68#/FT K-55 BUTT T&C casing set at 350' TVD

1st Intermediate: 9-5/8" OD 36#/FT J-55 ST&C casing set at 3100' TVD

2nd Intermediate: 7-5/8" 33.7 #/FT N-80 and S-95 FL4S casing set @ 10330' TVD

Production Liner: 5 1/2" 20#/FT N-80 FL4S Liner set @ 10000-14000' TVD

10. Casing setting depth and cementing program:

- A. 13-3/8" surface casing set at 350', or in 17-1/2" hole. Circulate cement with 420sx Class C with additives.

If cement does not circulate, a temperature survey will be run to find the TOC and then finish cementing to surface through 1" using Class C cement with additives.

- B. 9-5/8" 1st intermediate casing set at 3100' in 12-1/4" hole. Circulate cement with 800sx 35:65 POZ/Class C and 200sx Class C cement with additives.

- C. 7-5/8" 2nd intermediate casing set at 10330' TVD in 8-3/4" hole. Cement with 1500sxs Class C cement with additives.
- D. 5-1/2" production liner set from 10,000' to 14,000' TVD. Cement with 340sx Class C cement with additives.

Note: Cement volumes may need to be adjusted to hole caliper.

11. Pressure Control Equipment

0' – 350'	None
350' – 3100'	13-3/8" 5000# ram type preventers with one set blind rams and one set pipe rams and a 3000# annular preventer.
3100' – 14000' TVD	13-3/8" 5000# ram type preventers with one set blind rams and one set pipe rams and a 3000# annular type preventer. A choke manifold and 120 gallon accumulator with floor and remote operating stations and auxiliary power system. Rotating head below 10330' TVD. See attached Sketch of BOP Equipment.

A kelly cock will be installed and maintained in operable condition and a drill string safety valve in the open position will be available on the rig floor.

After setting the 7-5/8" casing, the blowout preventers and related control equipment shall be pressure tested to 5000 psi and 3000 psi respectively. Any equipment failing to test satisfactorily shall be repaired or replaced. Results of the BOP test will be recorded in the Driller's Log. The BOP's will be maintained ready for use until drilling operations are completed.

BOP drills will be conducted as necessary to assure that equipment is operational and each crew is properly trained to carry out emergency duties.

Accumulator shall maintain a pressure capacity reserve at all times to provide for the close-open-close sequence of the blind and pipe rams of the hydraulic preventers.

12. Mud Program:

- | | |
|---------------------|--|
| 0 – 350' | Spud with fresh water gel flocculated with lime and pretreated with 6-8 lbs/bbl cottonseed hulls, 2-4 lbs/bbl fiber, and 2 lbs/bbl paper for possible severe loss circulation zone 100-200'. If necessary drill without returns, or if full returns cannot be established at casing point mix 150 bbls viscous mud treated with LCM as above and spot on bottom before coming out of the hole to run casing. |
| 350' – 3100' | Drill out with brine water through a controlled section of the reserve pit. Add paper for seepage control or to sweep hole, as needed. At casing point, sweep hole with 150± bbls viscous mud with 6-8 lbs/bbl LCM before coming out of the hole to run casing. |
| 3100' – 10330' TVD | Drill out with fresh water through a controlled section of the reserve pit. Use paper, sea mud, and salt water gel slugs to sweep the hole and control seepage, as necessary. To control corrosion maintain ph 8.5 to 9.5 with caustic soda and use corrosion chemicals from 3100' to total depth. |
| 10330' – 14000' TVD | Circulate steel pits and mud up to 36-40 sec/qt viscosity, 6 to 8cc API filtrate, and 3.0+% KCL. |

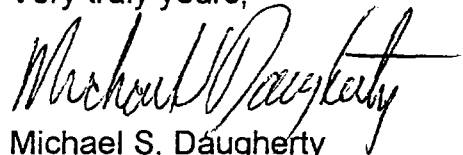
13. A direction well plan prepared by Directional Drilling Contractors LLC is attached which represents the proposed well plan.

14. Testing, Logging and Coring Program:

- A. Testing program: None anticipated.
- B. Mud logging program: Two man unit from 8000' to TD.
- C. Electric logging program: CNL/LDT/CAL/GR, DLL/CAL/GR.
- D. Coring program: Possible sidewall rotary cores.

15. No abnormal temperatures, or H₂S gas are anticipated. Adequate flare lines will be installed off the mud/gas separator where gas may be flared safely.
16. Anticipated starting date is October 15, 2000 subject to rig availability. It should take approximately 60 days to drill the well and another 10 days to complete.
17. The Multi-Point Surface Use & Operation Plan is attached.
18. If the Bureau of Land Management needs additional information to evaluate this application, please advise.

Very truly yours,

A handwritten signature in black ink, appearing to read "Michael S. Daugherty". The signature is fluid and cursive, with a long horizontal stroke extending from the end.

Michael S. Daugherty
Vice President, Operations

MSD/cb/NashUnit#52-BLM-APTD

Attachments



Job Number: Proposal

State/Country: New Mexico / USA

Company: MURCHISON/RK FORD & ASSOC. Declination: N/A

Lease/Well: NASH #52 DIRECTIONAL

Grid: N/A

Location: Eddy County

File name: C:\WINSERVE\NASH.SVY

Rig Name: N/A

Date/Time: 20-Jul-00 / 08:05

RKB: N/A

Curve Name: Nash #52

G.L. or M.S.L.: 2985

WINSERVE SURVEY CALCULATIONS
Minimum Curvature Method
Vertical Section Plane 356.75
Vertical Section Referenced to Wellhead
Rectangular Coordinates Referenced to Wellhead

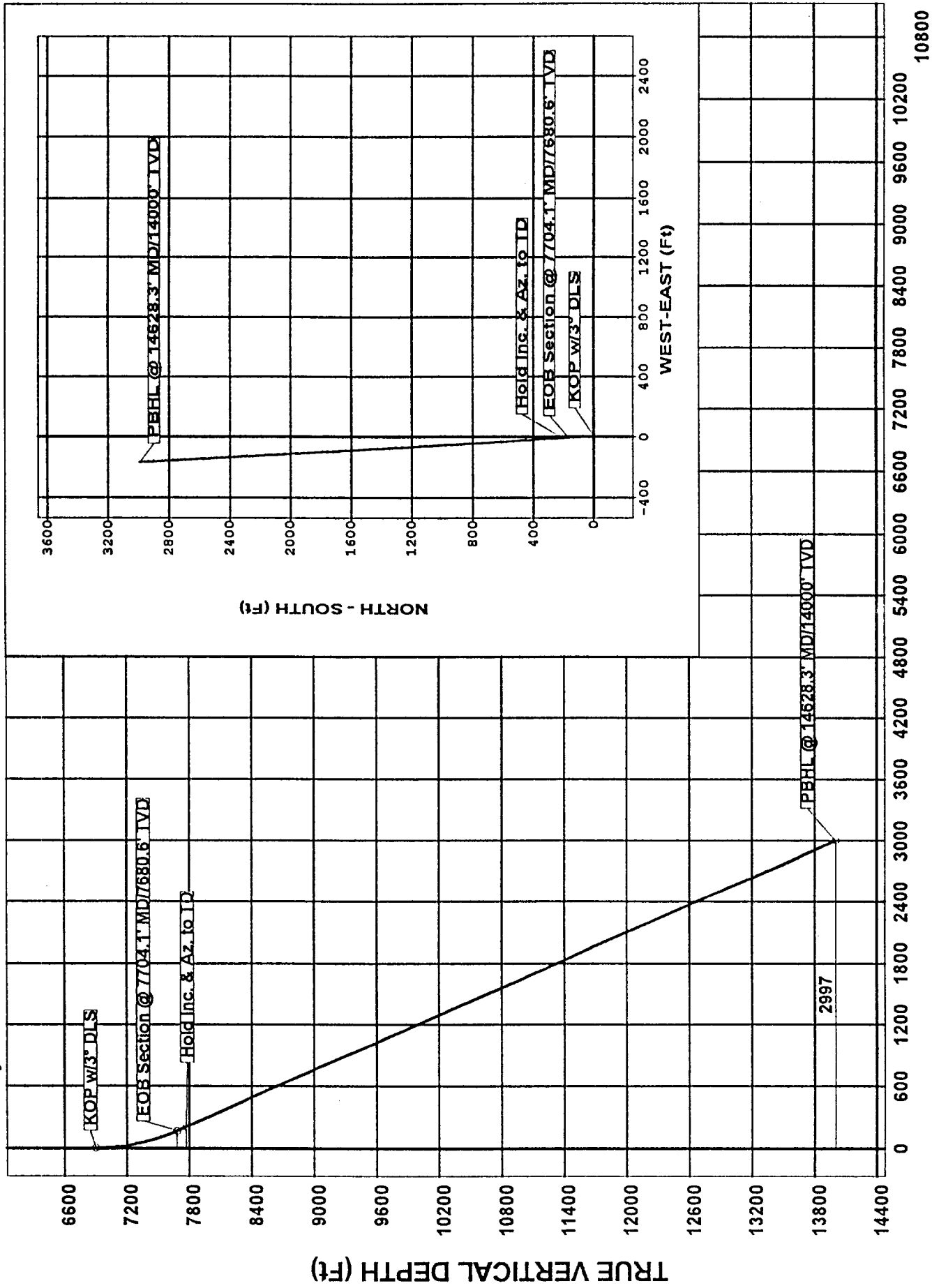
<i>Measured Depth FT</i>	<i>Incl Angle Deg</i>	<i>Drift Direction Deg</i>	<i>True Vertical Depth</i>	<i>Subsea TVD FT</i>	<i>N-S FT</i>	<i>E-W FT</i>	<i>Vertical Section FT</i>	<i>Dogleg Severity Deg/100</i>
KOP w/3° DLS								
6900.00	.00	356.75	6900.00	-3915.00	.00	.00	.00	.00
7000.00	3.00	356.75	6999.95	-4014.95	2.61	-.15	2.62	3.00
7100.00	6.00	356.75	7099.63	-4114.63	10.45	-.59	10.46	3.00
7200.00	9.00	356.75	7198.77	-4213.77	23.48	-1.33	23.51	3.00
7300.00	12.00	356.75	7297.08	-4312.08	41.67	-2.37	41.74	3.00
7400.00	15.00	356.75	7394.31	-4409.31	64.97	-3.69	65.08	3.00
7500.00	18.00	356.75	7490.18	-4505.18	93.32	-5.30	93.48	3.00
7600.00	21.00	356.75	7584.43	-4599.43	126.65	-7.20	126.85	3.00
7700.00	24.00	356.75	7676.81	-4691.81	164.85	-9.37	165.12	3.00
EOB Section @ 7704.1' MD/7680.6' TVD								
7704.14	24.12	356.75	7680.59	-4695.59	166.54	-9.46	166.81	3.00
Hold Inc. & Az. to TD								
7804.14	24.12	356.75	7771.86	-4786.86	207.34	-11.78	207.68	.00
7904.14	24.12	356.75	7863.12	-4878.12	248.15	-14.10	248.55	.00
8004.14	24.12	356.75	7954.39	-4969.39	288.95	-16.42	289.42	.00
8104.14	24.12	356.75	8045.66	-5060.66	329.76	-18.73	330.29	.00
8204.14	24.12	356.75	8136.92	-5151.92	370.57	-21.05	371.16	.00
8304.14	24.12	356.75	8228.19	-5243.19	411.37	-23.37	412.04	.00
8404.14	24.12	356.75	8319.45	-5334.45	452.18	-25.69	452.91	.00
8504.14	24.12	356.75	8410.72	-5425.72	492.98	-28.01	493.78	.00
8604.14	24.12	356.75	8501.99	-5516.99	533.79	-30.33	534.65	.00

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	Subsea TVD FT	N-S FT	E-W FT	Vertical Section FT	Dogleg Severity Deg/100
8704.14	24.12	356.75	8593.25	-5608.25	574.60	-32.64	575.52	.00
8804.14	24.12	356.75	8684.52	-5699.52	615.40	-34.96	616.39	.00
8904.14	24.12	356.75	8775.79	-5790.79	656.21	-37.28	657.27	.00
9004.14	24.12	356.75	8867.05	-5882.05	697.01	-39.60	698.14	.00
9104.14	24.12	356.75	8958.32	-5973.32	737.82	-41.92	739.01	.00
9204.14	24.12	356.75	9049.58	-6064.58	778.62	-44.24	779.88	.00
9304.14	24.12	356.75	9140.85	-6155.85	819.43	-46.56	820.75	.00
9404.14	24.12	356.75	9232.12	-6247.12	860.24	-48.87	861.62	.00
9504.14	24.12	356.75	9323.38	-6338.38	901.04	-51.19	902.50	.00
9604.14	24.12	356.75	9414.65	-6429.65	941.85	-53.51	943.37	.00
9704.14	24.12	356.75	9505.91	-6520.91	982.65	-55.83	984.24	.00
9804.14	24.12	356.75	9597.18	-6612.18	1023.46	-58.15	1025.11	.00
9904.14	24.12	356.75	9688.45	-6703.45	1064.27	-60.47	1065.98	.00
10004.14	24.12	356.75	9779.71	-6794.71	1105.07	-62.79	1106.85	.00
10104.14	24.12	356.75	9870.98	-6885.98	1145.88	-65.10	1147.73	.00
10204.14	24.12	356.75	9962.24	-6977.24	1186.68	-67.42	1188.60	.00
10304.14	24.12	356.75	10053.51	-7068.51	1227.49	-69.74	1229.47	.00
10404.14	24.12	356.75	10144.78	-7159.78	1268.30	-72.06	1270.34	.00
10504.14	24.12	356.75	10236.04	-7251.04	1309.10	-74.38	1311.21	.00
10604.14	24.12	356.75	10327.31	-7342.31	1349.91	-76.70	1352.08	.00
10704.14	24.12	356.75	10418.58	-7433.58	1390.71	-79.02	1392.96	.00
10804.14	24.12	356.75	10509.84	-7524.84	1431.52	-81.33	1433.83	.00
10904.14	24.12	356.75	10601.11	-7616.11	1472.33	-83.65	1474.70	.00
11004.14	24.12	356.75	10692.37	-7707.37	1513.13	-85.97	1515.57	.00
11104.14	24.12	356.75	10783.64	-7798.64	1553.94	-88.29	1556.44	.00
11204.14	24.12	356.75	10874.91	-7889.91	1594.74	-90.61	1597.31	.00
11304.14	24.12	356.75	10966.17	-7981.17	1635.55	-92.93	1638.19	.00
11404.14	24.12	356.75	11057.44	-8072.44	1676.35	-95.24	1679.06	.00
11504.14	24.12	356.75	11148.70	-8163.70	1717.16	-97.56	1719.93	.00
11604.14	24.12	356.75	11239.97	-8254.97	1757.97	-99.88	1760.80	.00
11704.14	24.12	356.75	11331.24	-8346.24	1798.77	-102.20	1801.67	.00
11804.14	24.12	356.75	11422.50	-8437.50	1839.58	-104.52	1842.55	.00
11904.14	24.12	356.75	11513.77	-8528.77	1880.38	-106.84	1883.42	.00
12004.14	24.12	356.75	11605.03	-8620.03	1921.19	-109.16	1924.29	.00
12104.14	24.12	356.75	11696.30	-8711.30	1962.00	-111.47	1965.16	.00
12204.14	24.12	356.75	11787.57	-8802.57	2002.80	-113.79	2006.03	.00
12304.14	24.12	356.75	11878.83	-8893.83	2043.61	-116.11	2046.90	.00
12404.14	24.12	356.75	11970.10	-8985.10	2084.41	-118.43	2087.78	.00
12504.14	24.12	356.75	12061.37	-9076.37	2125.22	-120.75	2128.65	.00
12604.14	24.12	356.75	12152.63	-9167.63	2166.03	-123.07	2169.52	.00
12704.14	24.12	356.75	12243.90	-9258.90	2206.83	-125.39	2210.39	.00

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	Subsea TVD FT	N-S FT	E-W FT	Vertical Section FT	Dogleg Severity Deg/100
12804.14	24.12	356.75	12335.16	-9350.16	2247.64	-127.70	2251.26	.00
12904.14	24.12	356.75	12426.43	-9441.43	2288.44	-130.02	2292.13	.00
13004.14	24.12	356.75	12517.70	-9532.70	2329.25	-132.34	2333.01	.00
13104.14	24.12	356.75	12608.96	-9623.96	2370.05	-134.66	2373.88	.00
13204.14	24.12	356.75	12700.23	-9715.23	2410.86	-136.98	2414.75	.00
13304.14	24.12	356.75	12791.49	-9806.49	2451.67	-139.30	2455.62	.00
13404.14	24.12	356.75	12882.76	-9897.76	2492.47	-141.61	2496.49	.00
13504.14	24.12	356.75	12974.03	-9989.03	2533.28	-143.93	2537.36	.00
13604.14	24.12	356.75	13065.29	-10080.29	2574.08	-146.25	2578.24	.00
13704.14	24.12	356.75	13156.56	-10171.56	2614.89	-148.57	2619.11	.00
13804.14	24.12	356.75	13247.83	-10262.83	2655.70	-150.89	2659.98	.00
13904.14	24.12	356.75	13339.09	-10354.09	2696.50	-153.21	2700.85	.00
14004.14	24.12	356.75	13430.36	-10445.36	2737.31	-155.53	2741.72	.00
14104.14	24.12	356.75	13521.62	-10536.62	2778.11	-157.84	2782.59	.00
14204.14	24.12	356.75	13612.89	-10627.89	2818.92	-160.16	2823.47	.00
14304.14	24.12	356.75	13704.16	-10719.16	2859.73	-162.48	2864.34	.00
14404.14	24.12	356.75	13795.42	-10810.42	2900.53	-164.80	2905.21	.00
14504.14	24.12	356.75	13886.69	-10901.69	2941.34	-167.12	2946.08	.00
14604.14	24.12	356.75	13977.95	-10992.95	2982.14	-169.44	2986.95	.00
PBHL @ 14628.3' MD/14000' TVD								
14628.30	24.12	356.75	14000.00	-11015.00	2992.00	-170.00	2996.83	.00



Company: MURCHISON/RK FORD & ASSOC.
Lease/Well: NASH #52 DIRECTIONAL
Location: Eddy County
State/Country: New Mexico / USA



○ - Nash #52

VERTICAL SECTION (Ft) @ 356.75°

1/0/93

Patterson Drilling Company

Rig #10

14,500'

DRAWWORKS

Drewstar N-46
Drake: V80 Double Parmac
Twin Disc Torque Converter

ENGINES

Two Caterpillar 3408 Diesels, 475 HP ea

DERRICK

Pyramid 136', 800,000# Rated Capacity

SUBSTRUCTURE

Pyramid 18', 800,000# Setback Capacity
KD - 19', Rotary Clearance - 15'

MUD PUMPS

Pump #1: Idaco 700 w/Cat 379
Pump #2: Drewstar D-750 w/Cat 379

DRILL STRING

4-1/2" Grade E, New, 20# Drill Pipe
6-1/2" New Drill Collars
Other sizes of drill pipe and drill collars are available

BLOWOUT PREVENTERS

13 5/8" 5,000# Ram/Ram/Annular Shaffer SL

MUD SYSTEM

Shale pit, 560 bbls, suction pit, 560 bbls, 5 sub guns, 2 electric mud stirrers, 2 mud mixing pumps (6x6 centrifugal), two 70 HP electric motors, double screen high-speed vibrating shale shaker

MUD HOUSE

None

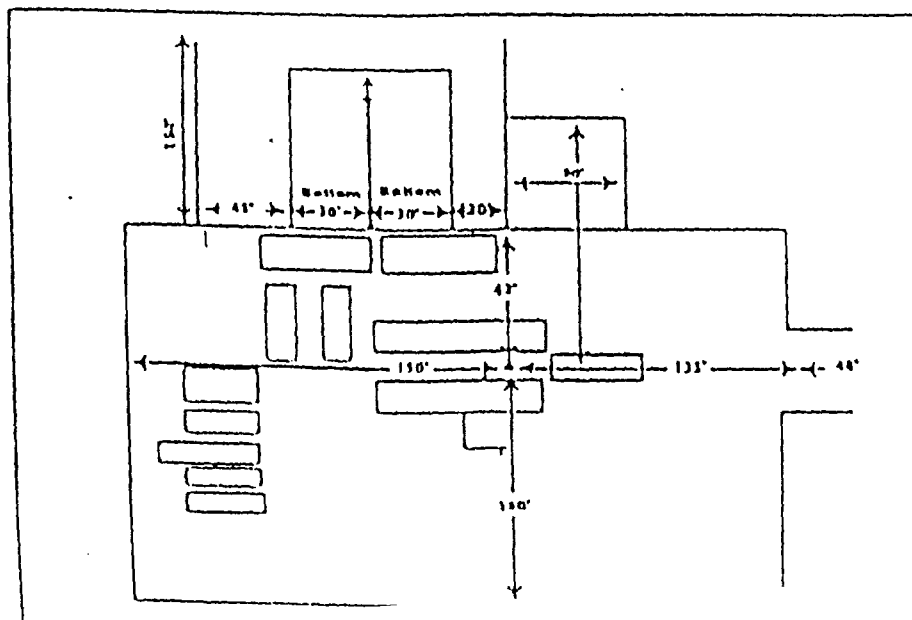
COMMUNICATIONS

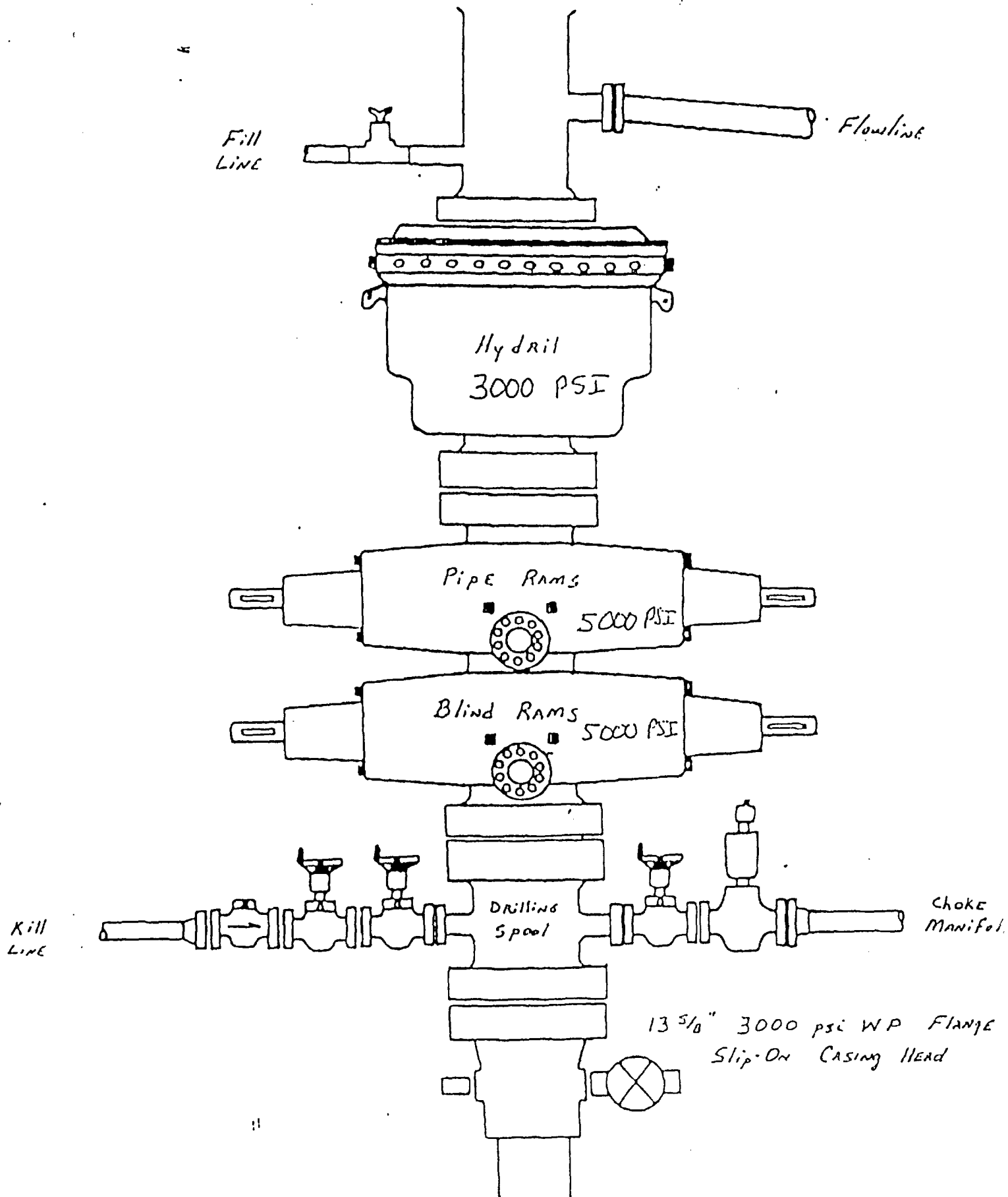
24 hour direct cellular telephone

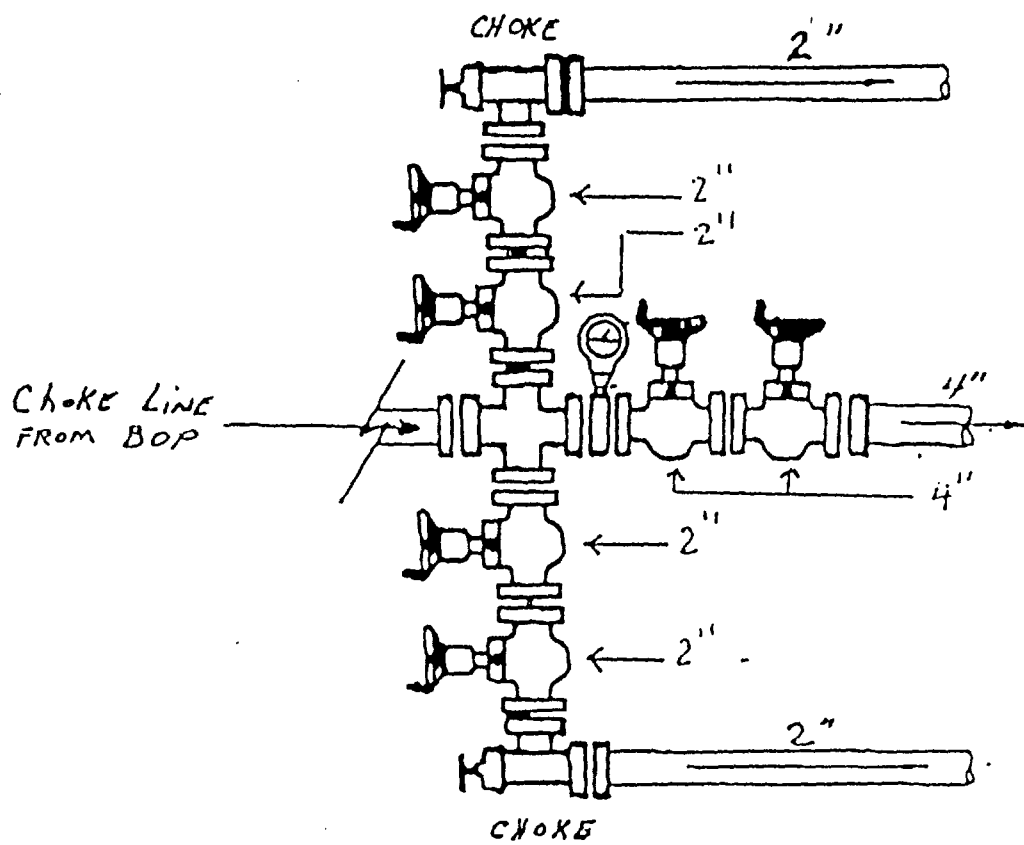
OTHER EQUIPMENT

Blocks, Gardner Denver 300 Ton
Hook, Gardner Denver 300 Ton
Swivel, 7 SX Drewstar 300 Ton
Rotary Table, Gardner Denver 27 1/2"
Electrical Power, Two 275 kW Generators w/3408 Cat
Fresh Water Storage, 1000 bbls
Housing.

"Hole Requirements will dictate actual Reserve Pit size (TOOLPUSHER SHOULD BE CONSULTED)"







MULTI-POINT SURFACE USE AND OPERATIONS PLAN

MURCHISON OIL & GAS, INC.
NASH UNIT #52
EDDY COUNTY, NEW MEXICO
LEASE NO. NM-0556859-A

This plan is submitted with the Application for Permit to Drill the above described well. The purpose of the plan is to identify the location of the proposed well, the proposed construction activities and operations plan, the magnitude of necessary surface disturbance involved and the procedures to be followed in rehabilitating the surface after completion of the operation so that a complete appraisal may be made of the environmental effects associated with the operation.

The well, and work area have been staked by a registered New Mexico land surveyor. Desert West Archaeological Services have been engaged to make an archaeological reconnaissance of the work area. Their findings concerning cultural resources will be reported to the Bureau of Land Management.

1. Existing Roads

A copy of a USGS "Remuda Basin, New Mexico" Topographic map is attached showing the proposed location. The well location is spotted on this map, which also shows the existing road system.

Directions to location: Travel East from Loving, NM on State Highway 31 and turn southeast on State Highway 128 and go 4 miles, then east 1 mile on lease road then north 2/10 mile to the location.

2. Planned Access Road

- A. An existing lease access road 100' North of the location will be used to gain access. About 100' feet of new lease road will have to be constructed.
- B. Surfacing material: Six inches of caliche and water, compacted and graded.
- C. Maximum Grade: Less than 3%
- D. Turnouts: None needed.
- E. Drainage Design: N/A.
- F. Culverts: None needed.

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Nash Unit #52
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- G. Cuts and Fills: Leveling the location will require minimal cuts or fills.
 - H. Gates or Cattleguards: None required.
- 3. Existing wells within a one mile radius of the proposed development well are shown on the attached map.
- 4. Location of Existing and/or Proposed Facilities
 - A. If the well is productive, production facilities will be constructed on the well pad. The facility will consist of a stack pack, one 300 bbl oil tank and one 300 bbl fiberglass water tank. All permanent above ground facilities will be painted in accordance with the BLM's painting guidelines simulating the color of sandstone brown.
 - B. All site security guidelines identified in 43 CFR 3162.7 regulations will be adhered to and a site security plan will be submitted for the Nash Unit #52 tank battery. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed.
- 5. Location and Type of Water Supply

Fresh water and brine water will be used to drill this well. It will be purchased from a supply in Carlsbad, NM vicinity and transported to the well site.
- 6. Source of Construction Materials

Caliche for surfacing the well pad will be obtained from a Federal pit located in Eddy County, New Mexico.
- 7. Method of Handling Waste Disposal
 - A. Drill Cuttings will be disposed of in drilling pits.
 - B. Drilling fluids will be allowed to evaporate in the drilling pits until pits are dry.
 - C. Water produced during tests will be disposed of in the drilling pits. Oil produced during tests will be stored in test tanks until sold.

- D. Current laws and regulations pertaining to the disposal of human waste will be complied with.
 - E. Trash, waste paper, garbage and junk will be collected in steel trash bins and removed after drilling and completion operations are completed. All waste material will be contained to prevent scattering by the wind.
 - F. All trash and debris will be removed from the wellsite within 30 days after finishing drilling and/or completion operations.
- 8. Ancillary Facilities
 - A. None needed.
- 9. Wellsite Layout
 - A. The location and dimensions of the well pad, mud pits, reserve pit and location of major rig components are shown on the attached well site layout sketch. If Patterson Drilling Company Rig #18 is not utilized a comparable rig will be substituted. The V-door will be to the North and the pits to the West.
 - B. Leveling of the wellsite will be required with minimal cuts or fills anticipated.
 - C. The reserve pit will be plastic lined.
 - D. The pad and pit area have been staked and flagged.
- 10. Plans for Restoration of the Surface
 - A. After completion of drilling and/or completion operations, all equipment and other materials not needed for operations will be removed. Pits will be filled and location cleaned of all trash and junk to leave the well site in as aesthetically pleasing condition as possible.
 - B. Any unguarded pits containing fluids will be fenced until they are filled.
 - C. After abandonment of the well, surface restoration will be in accordance with the land owner. This will be accomplished as expeditiously as possible. Barring unforeseen problems, all pits will be filled and leveled within 90 days after abandonment.

11. Other Information

- A. Topography: The location is a flat plain. GL elevation is 2987'.
- B. Soil: Sandy clay loams.
- C. Flora and Fauna: The vegetative cover is generally sparse consisting of mesquite, yucca, shinnery oak, sandsage and perennial native range grasses. Wildlife in the area is also sparse consisting of coyotes, rabbits, rodents, reptiles, dove and quail.
- D. Ponds and Streams: A Playa Lake is located within .2 miles to the north and west. See attached topographic map.
- E. Residences and Other Structures: There are no occupied dwellings within a 1 mile radius of the location.
- F. Archaeological, Historical and Cultural Sites: Cultural resources have been recorded in the area. Desert West Archaeological Services have been engaged to make an archaeological reconnaissance of the work area.
- G. Land Use: Cattle ranching.
- H. Surface Ownership: The surface is public land leased by the BLM to Hart M. Greenwood, Jr., P.O. Box 104, Carlsbad, NM. 88221. They will be notified of our intention to drill prior to any activity.

Upon completion of the well, any plastic material used to line the pits or sumps will be cut off below ground level as far as possible and disposed of before the pits are covered. All unattended pits containing liquid will be fenced and the liquid portion allowed to evaporate before the pits are broken and backfilled.

All waste associated with the drilling operation will be contained in steel bins and removed. All garbage and debris left on site will be removed within 30 days of the final completion. The well site, if a producer, will be maintained and kept clean of all trash and litter which detracts from the surrounding environment. Equipment will be maintained in accordance with good operating practice.

After the wellsite is cleaned and pits and sumps backfilled, any obstruction to the natural drainage will be corrected by ditching or terracing. All disturbed areas, including any access road no longer needed, will be ripped. Those areas will be reseeded with grass if, in the opinion of the land owner, it is required.

12. Operator's Representatives

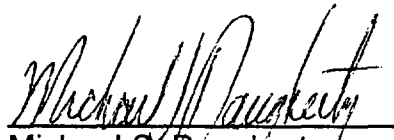
The Field representatives responsible for assuring compliance with the approved surface use and operations plan are as follows:

Michael S. Daugherty
1445 Ross Ave., Ste. 5300, LB 152
Dallas, TX. 75202-2883
Office Phone: (214) 953-1414
Home Phone: (972) 618-0792

Randy Ford
210 W. Wall St., Suite 600
Midland, TX. 79701
Office Phone: (915) 682-0440

13. Certification

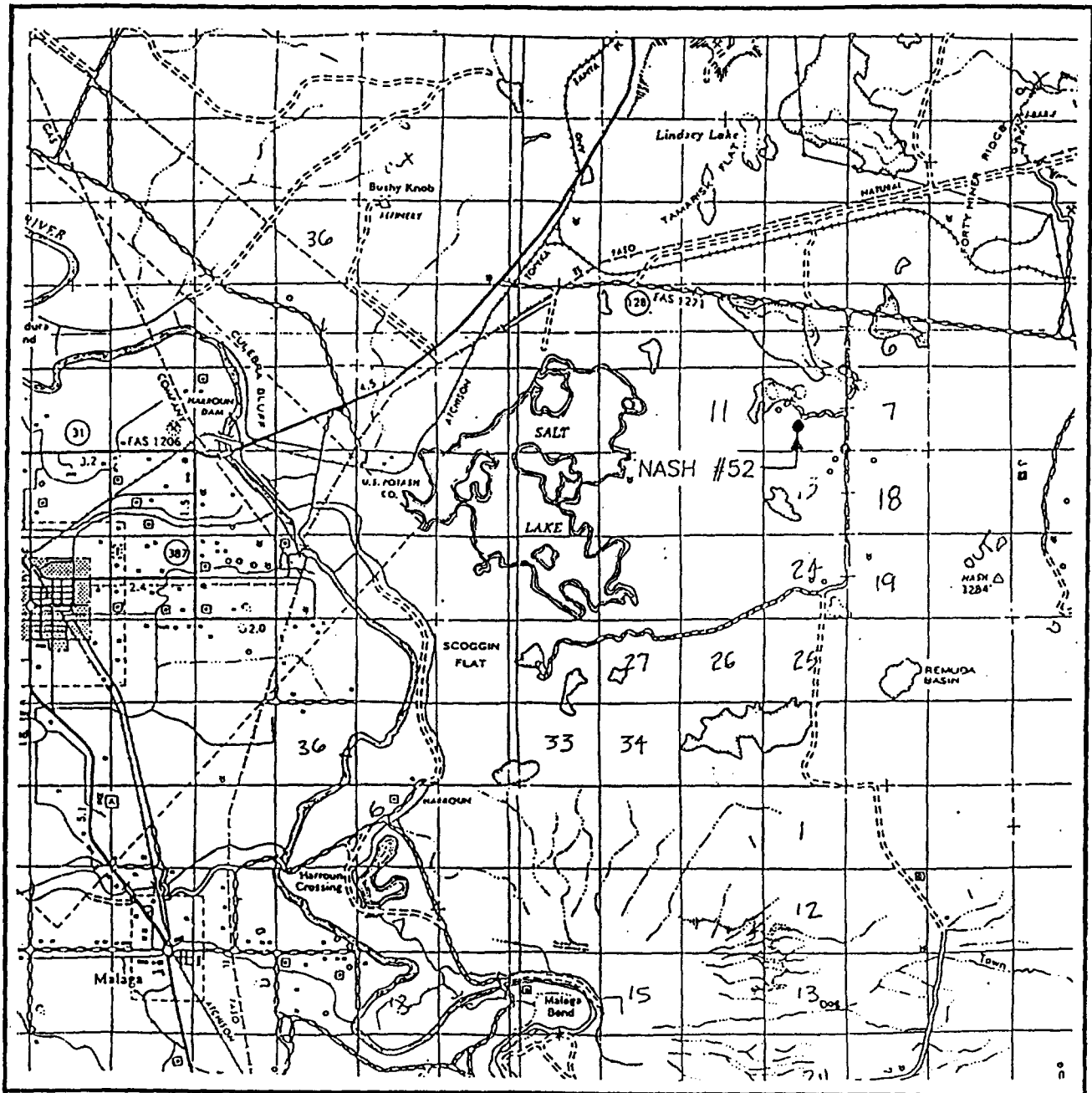
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and, that the work associated with the operations proposed herein will be performed by MOGI and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.


Michael S. Daugherty

7/21/00
Date

Vice President, Operations
Murchison Oil & Gas, Inc.

VICINITY MAP

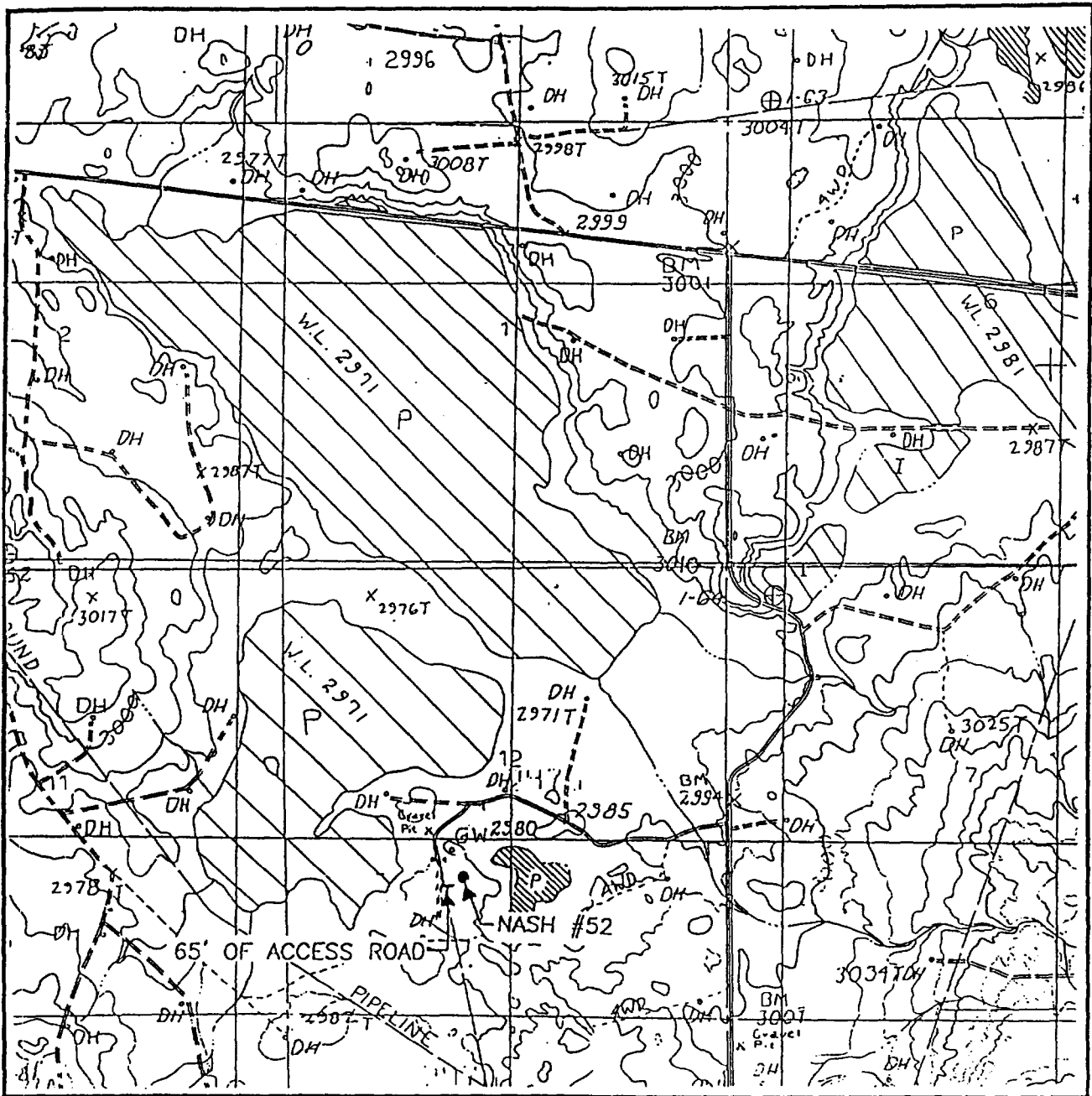


SCALE: 1" = 2 MILES

SEC. 12 TWP. 23-S RGE. 29-E
 SURVEY N.M.P.M.
 COUNTY EDDY
 DESCRIPTION 1628' FSL & 2150' FWL
 ELEVATION 2985
 OPERATOR MURCHISON
OIL & GAS, INC.
 LEASE NASH

JOHN WEST SURVEYING
 HOBBS, NEW MEXICO
 (505) 393-3117

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
REMUDA BASIN, N.M. - 10'

SEC. 12 TWP. 23-S RGE. 29-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 1628' FSL & 2150' FWL

ELEVATION 2985

OPERATOR MURCHISON
OIL & GAS, INC.

LEASE NASH

U.S.G.S. TOPOGRAPHIC MAP

REMUDA BASIN, N.M.

JOHN WEST SURVEYING
HOBBS, NEW MEXICO
(505) 393-3117

E-5229
20 A 31
9 "Remuda Basin-Fad"
Edg. Ld. Co.
Mesa Pet. 1/2