

BURLINGTON RESOURCES

SAN JUAN DIVISION

October 15, 1996

Mr. William LeMay
New Mexico Oil Conservation Division
2040 South Pacheco Street
Santa Fe, New Mexico 87505

Re: San Juan 27-5 Unit #47 *K*
1500'FSL, 1750'FWL Section 18, T-27-N, R-5-W, Rio Arriba County, NM
API #30-039-07049

RECEIVED

OCT 16 1996

OIL CON. DIV.
DIST. 3

Dear Mr. LeMay:

This is a request for administrative approval for downhole commingling the South Blanco Pictured Cliffs and Blanco Mesa Verde pools in the subject well. This is currently a Pictured Cliffs/Mesa Verde dual completion.

To comply with the New Mexico Oil Conservation Division rules, Burlington Resources Oil & Gas Company is submitting the following for your approval of this commingling:

1. Form C107A - Application for Downhole Commingling;
2. C-102 plat for each zone showing its spacing unit and acreage dedication;
3. Production curve for both the Pictured Cliffs and Mesa Verde for at least one year;
4. Notification list of offset operators - Burlington is the offset operator;
5. Shut in wellhead pressure and calculated down hole pressure;
6. Nine-section plats for the Pictured Cliffs and Mesa Verde.

Notification of Pictured Cliffs and Mesa Verde interest owners is covered under Case #11626 before the New Mexico Oil Conservation Division.

Because we are adding pay in the Mesa Verde, a fixed percent allocation cannot be calculated at this time. Allocation will be based on percentage of pitot gauge obtained during workover.

Please let me know if you require additional data.

Sincerely,



Peggy Bradfield
Regulatory/Compliance Administrator

encs.

DISTRICT I
P.O. Box 1980, Hobbs, NM 88241-1980
DISTRICT II
811 South First St., Artesia, NM 88210-2835
DISTRICT III
1000 Rio Brazos Rd, Aztec, NM 87410-1693

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

2040 S. Pacheco
Santa Fe, New Mexico 87505-6429

Form C-107-A
New 3-12-96

APPROVAL PROCESS :

☒ Administrative
☐ Hearing

APPLICATION FOR DOWNHOLE COMMINGLING

EXISTING WELLBORE

☒ YES ☐ NO

Burlington Resources Oil & Gas Company

PO Box 4289, Farmington, NM 87499

Operator

Address

San Juan 27-5 Unit

47

K-18-27N-5W

Rio Arriba

Lease

Well No.

Unit Ltr. - Sec - Twp - Rge

County

Spacing Unit Lease Types: (check 1 or more)

GRID NO. 14538 Property Code 7454 API NO. 30-045-07049 Federal ☒ State (and/or) Fee

The following facts are submitted
in support of downhole
commingling:

Upper
Zone

Intermediate
Zone

Lower
Zone

1. Pool Name and Pool Code	South Blanco Pictured Cliffs - 72439	RECEIVED OCT 16 1996 OIL CON. DIV. a. DIST. 3	Blanco Mesaverde - 72319
2. Top and Bottom of Pay Section (Perforations)	3210-3278'		4853-5502'
3. Type of production (Oil or Gas)	Gas		Gas
4. Method of Production (Flowing or Artificial Lift)	Flowing		Flowing
5. Bottomhole Pressure Oil Zones - Artificial Lift: Estimated Current Gas & Oil - Flowing: Measured Current All Gas Zones: Estimated or Measured Original	(Current) a. 187 psi (Original) b. 1020 psi	a. b.	a. 511 psi b. 941 psi
6. Oil Gravity (°API) or Gas BTU Content	BTU 1133		BTU 1237
7. Producing or Shut-In?	producing		producing
Production Marginal? (yes or no)	yes		yes
* If Shut-In and oil/gas/water rates of last production Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data. * If Producing, give data and oil/gas/water of recent test (within 60 days)	Date: Rates: Date: 9-29-96 Rates: 14 MCF/D	Date: Rates: Date: Rates:	Date: Rates: Date: 9-29-96 Rates: 22 MCF/D
8. Fixed Percentage Allocation Formula -% for each zone (total of %'s to equal 100%)	Will		

9. If allocation formula is based upon something other than current or past production, or is based upon some other method, submit attachments with supporting data and/or explaining method and providing rate projections or other required data.

10. Are all working, overriding, and royalty interests identical in all commingled zones? ☐ Yes ☒ No

If not, have all working, overriding, and royalty interests been notified by certified mail? ☒ Yes ☐ No

Have all offset operators been given written notice of the proposed downhole commingling? ☒ Yes ☐ No

11. Will cross-flow occur? ☒ Yes ☐ No If yes, are fluids compatible, will the formations not be damaged, will any cross-flowed production be recovered, and will the allocation formula be reliable. ☒ Yes ☐ No (If No, attach explanation)

12. Are all produced fluids from all commingled zones compatible with each other? ☒ Yes ☐ No

13. Will the value of production be decreased by commingling? ☐ Yes ☒ No (If Yes, attach explanation)

14. If this well is on, or communitized with, state or federal lands, either the Commissioner of Public Lands or the United States Bureau of Land Management has been notified in writing of this application. ☒ Yes ☐ No

15. NMOCD Reference Cases for Rule 303(D) Exceptions: ORDER NO(S). Case #11626

16. ATTACHMENTS:

- * C-102 for each zone to be commingled showing its spacing unit and acreage dedication.
- * Production curve for each zone for at least one year. (If not available, attach explanation.)
- * For zones with no production history, estimated production rates and supporting data.
- * Data to support allocation method or formula.
- * Notification list of all offset operators.
- * Notification list of working, overriding, and royalty interests for uncommon interest cases.
- * Any additional statements, data, or documents required to support commingling.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE Peggy Bradfield TITLE Regulatory Administrator DATE 10-2-96

TYPE OR PRINT NAME Peggy Bradfield TELEPHONE NO. (505) 326-9700

NEW MEXICO OIL CONSERVATION COMMISSION
Well Location and Acreage Dedication Plat

Section A.

Date **FEBRUARY 16, 1959**

Operator **EL PASO NATURAL GAS COMPANY** Lease **SAN JUAN 27-5 UNIT** SF **079391**
Well No. **17 (PM)** Unit Letter **K** Section **18** Township **27-N** Range **5-W** NMPM
Located **1500** Feet From **SOUTH** Line **1750** Feet From **WEST** Line
County **RIO ARriba** G. L. Elevation **6656** Dedicated Acreage **320 & 160** Acres
Name of Producing Formation **MESA VERDE & PICTURED CLIFF** Post **BLANCO MV, SO. BLANCO PC EXT.**

1. Is the Operator the only owner in the dedicated acreage outlined on the plat below?
Yes ☒ No ☐
2. If the answer to question one is "no", have the interests of all the owners been consolidated by communitization agreement or otherwise? Yes ☐ No ☐ If answer is "yes", Type of Consolidation.

3. If the answer to question two is "no", list all the owners and their respective interests below:

Owner

Land Description

Section B.

This is to certify that the information in Section A above is true and complete to the best of my knowledge and belief.

El Paso Natural Gas Company

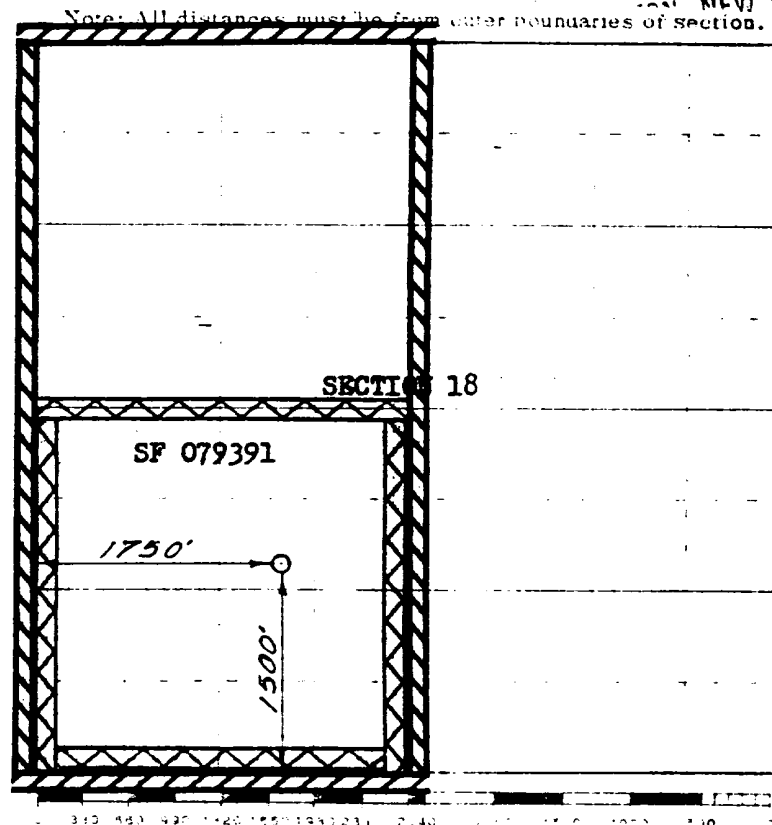
(Operator)

ORIGINAL SIGNED J.J. TILLERSON

(Representative)

Box 997

(Address)

Farmington, New Mexico

Scale 4 inches equal 1 mile

This is to certify that the above plat was prepared from field notes of actual surveys made by me or under my supervision and that the same are true and correct to the best of my knowledge and belief.

(Seal)

Farmington, New Mexico

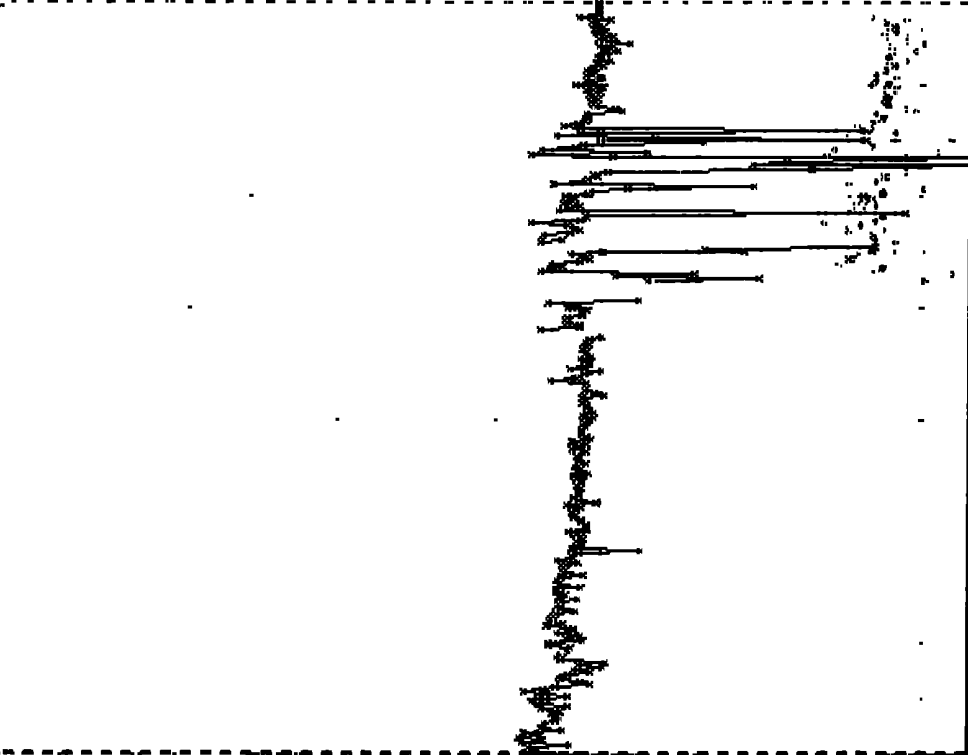
Date Surveyed **FEBRUARY 10, 1959**

David O. Tillerson
Registered Professional Engineer and/or Land Surveyor

Major = GAS

0.1	1	10	100	1000	10000	* WATER
0.01	0.1	1	10	100	1000	* OIL/GAS
0.01	0.1	1	10	100	1000	* OIL
0.1	1	10	100	1000	10000	* GAS

SON JUN 27 5 UNIT : 42 : 53.500 : 1 Mosaerde



Prop 3859 *	☒ *GAS Mcf/d ☐ *OIL Bbl/d ☐ *OIL/GAS ☐ *WATER Bbls/d	 RateTime Semi Log
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[illegible]

Major = GAS

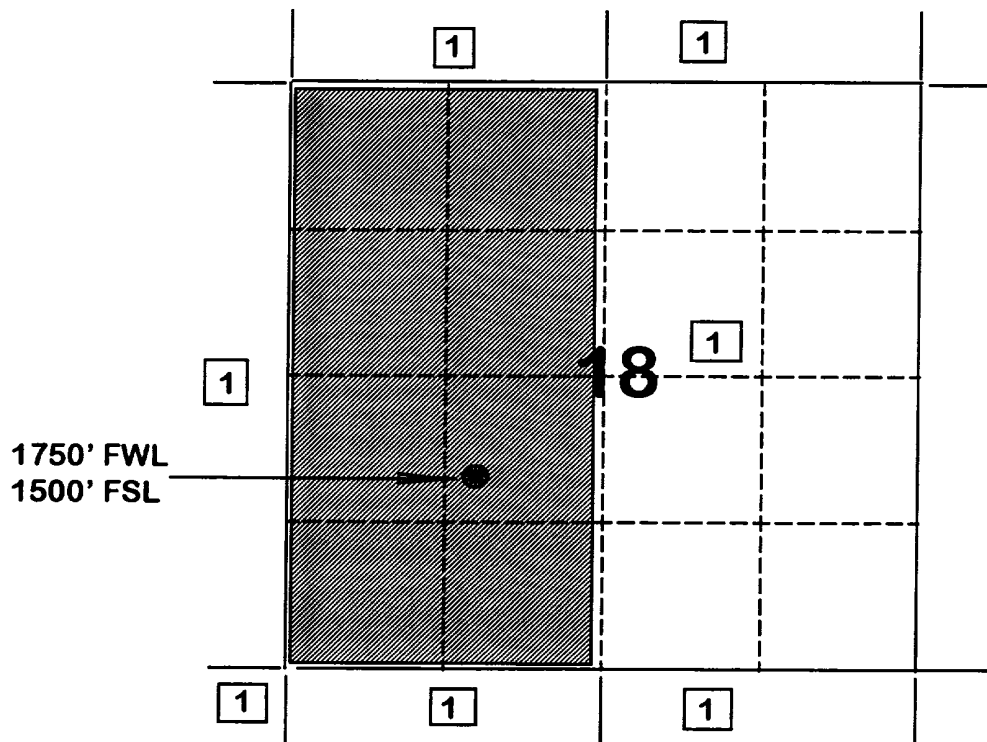
BURLINGTON RESOURCES OIL AND GAS COMPANY

San Juan 27-5 Unit #47

OFFSET OPERATOR \ OWNER PLAT

Mesaverde (W/2) / Pictured Cliffs (SW/4) Formations Commingle Well

Township 27 North, Range 5 West



1) Burlington Resources Oil and Gas Company Successor to Meridian Oil Inc.

27-5 #47 Initial PC

BHP.XLS

**FLOWING AND STATIC BHP
CULLENDER AND SMITH METHOD**

VERSION 1.0 3/13/94

GAS GRAVITY	0.648
COND. OR MISC. (C/M)	M
%N2	0.27
%CO2	0.41
%H2S	0
DIAMETER (IN)	2.441
DEPTH (FT)	3210
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	100
FLOWRATE (MCFPD)	1000
SURFACE PRESSURE (PSIA)	935
BOTTOMHOLE PRESSURE (PSIA)	1020.7

27-5 #47 Current Pc

BHP.XLS

**FLOWING AND STATIC BHP
CULLENDER AND SMITH METHOD**

VERSION 1.0 3/13/94

GAS GRAVITY	0.648
COND. OR MISC. (C/M)	M
%N2	0.27
%CO2	0.41
%H2S	0
DIAMETER (IN)	2.441
DEPTH (FT)	3210
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	100
FLOWRATE (MCFPD)	1000
SURFACE PRESSURE (PSIA)	161
BOTTOMHOLE PRESSURE (PSIA)	186.9

27-5 #47 Initial MV

BHP.XLS

**FLOWING AND STATIC BHP
CULLENDER AND SMITH METHOD**

VERSION 1.0 3/13/94

GAS GRAVITY	0.713
COND. OR MISC. (C/M)	M
%N2	0.34
%CO2	0.75
%H2S	0
DIAMETER (IN)	2.441
DEPTH (FT)	4853
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	120
FLOWRATE (MCFPD)	1000
SURFACE PRESSURE (PSIA)	814
BOTTOMHOLE PRESSURE (PSIA)	940.9

21-5 #47 Current MV

BHP.XLS

**FLOWING AND STATIC BHP
CULLENDER AND SMITH METHOD**

VERSION 1.0 3/13/94

GAS GRAVITY	0.713
COND. OR MISC. (C/M)	M
%N2	0.34
%CO2	0.75
%H2S	0
DIAMETER (IN)	2.441
DEPTH (FT)	4853
SURFACE TEMPERATURE (DEG F)	60
BOTTOMHOLE TEMPERATURE (DEG F)	120
FLOWRATE (MCFPD)	1000
SURFACE PRESSURE (PSIA)	442
BOTTOMHOLE PRESSURE (PSIA)	511.1

OPR008M1 0782

0008 CHROMATOGRAPH TEST MAIN SCREEN

18:37:41.3 10/01/96

FUNCTION (A,C,D,I) I ** DATA AT TEST PRESSURE UNLESS NOTED **
 MP NUMBER 72433 SAN JUAN 27-5 UNIT 47 (PC)
 EFFECTIVE DATE 19950301
 REGION CD 42 SAN JUAN
 MP TYPE CODE 10 GAS METER - WELLHEAD SALES

 SAMPLE TYPE CODE (GAS, LIQ, BTU) GAS ----- BTU/CF -----
 SAMPLE DATE 19950208 --- (AT 14.73 PSIG) ---
 SAMPLE LINE PRESSURE (PSIG) WET 1125.093 DRY 1145.000
 SAMPLE LINE TEMPERATURE (DEG F) -----
 TEST DATE ----- BTU/CF -----
 TEST PRESSURE (PSIG) 14.730 WET 1125.093 DRY 1145.000
 TEST TEMPERATURE (DEG F) 60 VAPOR FACTOR -----
 TEST LIFE (MONTHS) 6
 TESTER SOURCE BA NUMBER 888029 EL PASO NATURAL GAS
 TEST PURPOSE CODE -----

 03=DETAIL SCR 04=MP-NM BRWS 06=MP/DS LST 07=MP/WN LST
 11=PREV SCR 12=MAIN MENU 20=NEXT REC
 21=REFRESH SCR 22=PREV MENU 24=HELP PA1=TERMINATE
 B MY JOB LU #2

OPR008M2 0782

0008 CHROMATOGRAPH GAS SAMPLE DETAIL

18:38:14.1 10/01/96

GPM ** DATA AT 14.730 PSIG UNLESS NOTED **
 MOL % (AT 14.73)
 HYDROGEN ----- MP NUMBER 72433
 HELIUM ----- EFFECTIVE DATE 19950301
 NITROGEN 0.27
 OXYGEN -----
 HYDROGEN SULFIDE -----
 CARBON DIOXIDE 0.41 -- GASOLINE CONTENT (GPM) --
 METHANE 89.12 26/70 GASOLINE -----
 ETHANE 5.53 1.4793 100% PROPANE -----
 PROPANE 2.81 0.7744 EXCESS BUTANES -----
 ISO-BUTANE 0.47 0.1537 TOTAL -----
 N-BUTANE 0.67 0.2113
 ISO-PENTANE 0.20 0.0732 ----- SPECIFIC GRAVITY -----
 N-PENTANE 0.15 0.0543 CALCULATED 0.6480
 HEXANE ----- MEASURED -----
 HEXANE PLUS 0.37 0.1614
 HEPTANE PLUS -----
 TOTALS 100.00 2.9076 SULPHUR GRAINS / 100 CU FT -----

 03=MAIN SCREEN 24=HELP PA1=TERMINATE
 B MY JOB NUM LU #2

REQUESTED RECORD NOT FOUND (NEXT RECORD DISPLAYED)

OPR008M1 0782

0008 CHROMATOGRAPH TEST MAIN SCREEN

18:33:45.2 10/01/96

FUNCTION (A,C,D,I) I ** DATA AT TEST PRESSURE UNLESS NOTED **
 MP NUMBER 72434 SAN JUAN 27-5 UNIT 47 (MV)
 EFFECTIVE DATE 19950801
 REGION CD 42 SAN JUAN
 MP TYPE CODE 10 GAS METER - WELLHEAD SALES

 SAMPLE TYPE CODE (GAS, LIQ, BTU) GAS ----- BTU/CF -----
 SAMPLE DATE 19950801 --- (AT 14.73 PSIG) ---
 SAMPLE LINE PRESSURE (PSIG) WET 1214.511 DRY 1236.000
 SAMPLE LINE TEMPERATURE (DEG F) -----
 TEST DATE ----- BTU/CF -----
 TEST PRESSURE (PSIG) 14.730 WET 1214.511 DRY 1236.000
 TEST TEMPERATURE (DEG F) 60 VAPOR FACTOR -----
 TEST LIFE (MONTHS) 6
 TESTER SOURCE BA NUMBER 888029 EL PASO NATURAL GAS
 TEST PURPOSE CODE -----

 03=DETAIL SCR 04=MP-NM BRWS 06=MP/DS LST 07=MP/WN LST
 11=PREV SCR 12=MAIN MENU 20=NEXT REC
 21=REFRESH SCR 22=PREV MENU 24=HELP PA1=TERMINATE
 B MY JOB LU #2

OPR008M2 0782

0008 CHROMATOGRAPH GAS SAMPLE DETAIL

18:34:33.8 10/01/96

GPM ** DATA AT 14.730 PSIG UNLESS NOTED **
 MOL % (AT 14.73)
 HYDROGEN
 HELIUM
 NITROGEN 0.34
 OXYGEN
 HYDROGEN SULFIDE
 CARBON DIOXIDE 0.75
 METHANE 80.80
 ETHANE 10.45 2.7954
 PROPANE 4.61 1.2705
 ISO-BUTANE 0.78 0.2551
 N-BUTANE 1.18 0.3721
 ISO-PENTANE 0.40 0.1464
 N-PENTANE 0.29 0.1050
 HEXANE
 HEXANE PLUS 0.40 0.1745
 HEPTANE PLUS
 TOTALS 100.00 5.1190
 MP NUMBER 72434
 EFFECTIVE DATE 19950801
 -- GASOLINE CONTENT (GPM) --
 26/70 GASOLINE
 100% PROPANE
 EXCESS BUTANES
 TOTAL
 ----- SPECIFIC GRAVITY -----
 CALCULATED 0.7130
 MEASURED
 SULPHUR GRAINS / 100 CU FT

 03=MAIN SCREEN 24=HELP PA1=TERMINATE
 B MY JOB NUM LU #2

The map displays the S.J. 28-6 Unit and its surrounding areas. The unit is divided into several sections, each labeled with a number and a survey name. The sections are:

- Section 12:** S.J. 28-6 Unit. Contains survey points 80, 193, and 194. A mineral right (M) is shown near point 80.
- Section 7:** S.J. 27-5 Unit. Contains survey points 46, 69M, and 174. A mineral right (M) is shown near point 69M.
- Section 8:** S.J. 27-5 Unit. Contains survey points 150, 176, 70, and 63. A mineral right (M) is shown near point 176.
- Section 13:** S.J. 28-6 Unit. Contains survey points 82, 195, and 198. A mineral right (M) is shown near point 82.
- Section 17:** S.J. 27-5 Unit. Contains survey points 26, 180, and 179. A mineral right (M) is shown near point 180.
- Section 18:** S.J. 27-5 Unit. Contains survey points 47, 49A, 49, and 50. A mineral right (M) is shown near point 49A.
- Section 19:** S.J. 27-5 Unit. Contains survey points 48, 50, and 69A. A mineral right (M) is shown near point 50.
- Section 20:** S.J. 27-5 Unit. Contains survey points 37, 19, and 58. A mineral right (M) is shown near point 37.

The map also shows various land parcels and mineral rights, including:

- Parcel 68:** S.J. 28-6 Unit.
- Parcel 47:** S.J. 27-5 Unit.
- Parcel 49A:** S.J. 27-5 Unit.
- Parcel 49:** S.J. 27-5 Unit.
- Parcel 50:** S.J. 27-5 Unit.
- Parcel 48:** S.J. 27-5 Unit.
- Parcel 69A:** S.J. 28-6 Unit.
- Parcel 69:** S.J. 28-6 Unit.
- Parcel 139M:** S.J. 27-5 Unit.

The map is oriented with North at the top.

