ABOVE THIS LINE FOR DIVISION USE ONL'

#### NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -2040 South Pacheco, Santa Fe, NM 87505



#### ADMINISTRATIVE APPLICATION COVERSHEET

THIS COVERSHEET IS	MANDATORY FOR ALL ADMINISTRATIVE APPLICA WHICH REQUIRE PROCESSING AT THE	TION FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS EDIVISION LEVEL IN SANTA FE
plication Acronym		
	[NSP-Non-Standard Proration Unit]	[NSL-Non-Standard Location]

Ap [DD-Directional Drilling] [SD-Simultaneous Dedication] [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling] [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement] [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion] [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase] [PPR-Positive Production Response] [EOR-Qualified Enhanced Oll Recovery Certification] [1] TYPE OF APPLICATION - Check Those Which Apply for [Ah Location - Spacing Unit - Directional Drilling MINSL  $\Box$  DD ☐ NSP  $\square$  SD Check One Only for [B] or [C] CIL CONSERVATION DIVISION [B] Commingling - Storage - Measurement ☐ DHC  $\square$  CTB □ PLC OLS OLS  $\Box$  OLM [C]Injection - Disposal - Pressure Increase - Enhanced Oil Recovery □ WFX  $\square$  PMX □ SWD ☐ IPI □ EOR [2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or  $\Box$  Does Not Apply [A] ☐ Working, Royalty or Overriding Royalty Interest Owners [B]☐ Offset Operators, Leaseholders or Surface Owner [C]☐ Application is One Which Requires Published Legal Notice [D] Notification and/or Concurrent Approval by BLM or SLO

U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office

[E] ☐ For all of the above, Proof of Notification or Publication is Attached, and/or.

[F] ☐ Waivers are Attached

#### [3] INFORMATION / DATA SUBMITTED IS COMPLETE - Certification

I hereby certify that I, or personnel under my supervision, have read and complied with all applicable Rules and Regulations of the Oil Conservation Division. Further, I assert that the attached application for administrative approval is accurate and complete to the best of my knowledge and where applicable, verify that all interest (WI, RI, ORRI) is common. I understand that any omission of data (including API numbers, pool codes, etc.), pertinent information and any required notification is cause to have the application package returned with no action taken.

Note: Statement m	u <del>st be </del> completed by an indi	vidual with managerial and/or su	pervisory capacity.
		"pull	
Print or Type Name	Signature Signature	Title	Date

### BURLINGTON RESOURCES

SAN JUAN DIVISION

Sent Federal Express

Ms. Lori Wrotenbery, Director New Mexico Oil Conservation Division 2040 South Pacheco Santa Fe. New Mexico 87505

Re:

Allison Unit #23M

1940'FNL, 790'FWL Section 19, T-32-N, R-6-W, San Juan County, NM

30-045-not assigned

Dear Ms. Wrotenbery:

Burlington Resources is applying for administrative approval of an unorthodox gas well location for the Blanco Mesa Verde and Basin Dakota pools. This application for the referenced location is for topographic and archaeological reasons, the presence of pipelines, and especially at the request of the landowner.

Production from both the Blanco Mesa Verde pool and Basin Dakota pool is to be included in a 316.83 acre gas spacing and proration unit comprising of the west half (W/2) of Section 19 which is currently dedicated to the Allison Unit #23X (30-045-13189) located at 990'FSL, 965'FWL of Section 19.

The following attachments are for your review:

1. Application for Permit to Drill.

2. Completed C-102 at referenced location.

3. Offset operators/owners plat – Burlington is the offset operator.

4. 7.5 minute topographic map, and enlargement of the map to define topographic features.

We appreciate your earliest consideration of this application.

Sincerely,

Peggy Bradfield

Regulatory/Compliance Administrator

XC:

NMOCD - Aztec District Office

Bureau of Land Management - Farmington District Office

#### **UNITED STATES** DEPARTMENT ÖF THE INTERIOR **BUREAU OF LAND MANAGEMENT**

	APPLICATION FOR PE	RMIT TO DRILL, DEEPEN, OR PL	.UG BACK
1a.	Type of Work DRILL		se Number SF-081155 it Reporting Number
1b.	Type of Well GAS	6. If Ir	ndian, All. or Tribe
2.	Operator BURLINGTON		t Agreement Name
or of e∰. Mainensi	RESOURCES Oil & Gas	Company	Allison Unit
3.	Address & Phone No. of Operator PO Box 4289, Farmington, 1 (505) 326-9700	M 87499 9. We	m or Lease Name Allison, Unit Number 23M
<u> </u>	The County of th	19 Market Market . No Lork	185,411
4.	Location of Well 1940'FNL, 790'FWL		eld, Pool, Wildcat o MV/Basin Dk
	Latitude 36 <sup>O</sup> 58.1, Longitude	e 107 <sup>0</sup> 30.3	c., Twn, Rge, Mer. (NMPM) Sec 19, T-32-N, R-6-W 30-045-
14.	Distance in Miles from Nearest Town 4 miles to Allison	12. Co	ounty 13. State SJ NM
15.	Distance from Proposed Location to Ne	arest Property or Lease Line	
16.	Acres in Lease	17. Ad	cres Assigned to Well 316.83
18.	Distance from Proposed Location to Ne	arest Well, Drlg, Compl, or Applied f	or on this Lease
19.	Proposed Depth 8020'	20. Ro	otary or Cable Tools Rotary
21.	Elevations (DF, FT, GR, Etc.) 6448'GR	22. Aj	pprox. Date Work will Start
23.	Proposed Casing and Cementing Progra See Operations Plan attack	m ned	
24.	Authorized by: Regulatory/Comp.	iance Administrator	5-30-95 Date
PERMI	г NO.	APPROVAL DATE	
			······

Archaeological Report to be submitted

Threatened and Endangered Species Report to be submitted

Threatened and Endangereu Species Ropers to a superstanding to the NOTE: This format is issued in lieu of U.S. BLM Form 3160-3

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 presentations as to any matter within its jurisdiction.

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District I PO Box 1980, Hobbs, NM 88241-1980

District II PO Drawer DD, Artesia, NM 88211-0719

District III 1000 Rio Brazos Rd., Aztec, NM 87410

District IV PO Box 2088, Santa Fe, NM 87504-2088 State of New Mexico
Energy, Minerals & Natural Resources Department

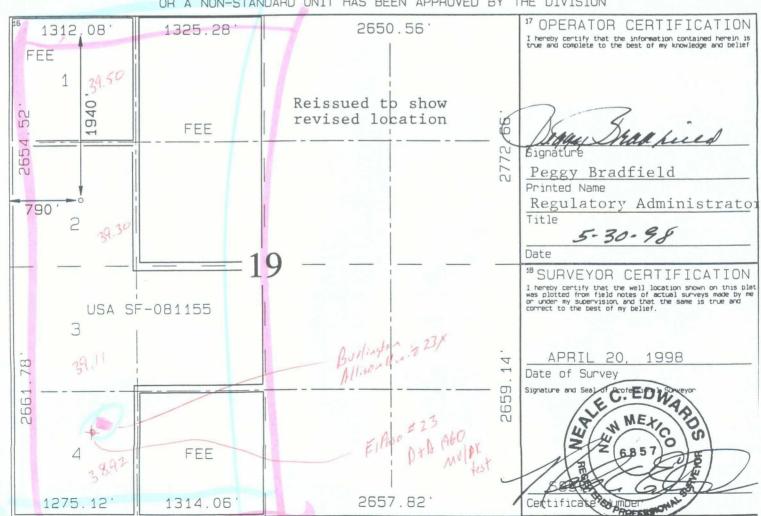
OIL CONSERVATION DIVISION PO Box 2088 Santa Fe. NM 87504-2088 Form C-102 Revised February 21, 1994 Instructions on back Appropriate District Office

Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

AMENDED REPORT

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

1	ADT ALLES		***			OTILAGE DEDI	³Pool Name	10		
А	API Number	2		Pool Ccde Pool Name						
30-	045-		72319/71599 Blanco Mesaverde/Basin Dakota							
*Property	Code		Property Name Well Number					ell Number		
6784	4		ALLISON UNIT 23M					23M		
'OGRID N	No.	,			*Operator	Name			. ot	Elevation
1453			BURLINGTON RESOURCES OIL & GAS COMPANY 6448'					6448'		
				1	<sup>10</sup> Surface l	Location			THE .	
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/Wes	st line	County
E	19	32N	6W	1	1940	NORTH	790	WES	ST	SAN JUAN
		11 Br	ottom	Hole L	_ocation I	f Different	From Surf	ace		
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/Wes	st line	County
12 Dedicated Acres MV-W/316		<sup>13</sup> Joint or Infi	ill <sup>14</sup> Cons	solidation Code	e <sup>15</sup> Order No.					
DK-W/316	1.83					4 20 30 30 30				
NO ALLOW	ABLE W		SSIGNED NON-ST				INTERESTS H		EN CON	NSOLIDATED
		11	_				17			



#### OPERATIONS PLAN

Well Name: Allison Unit #23M

Location: 1940'FNL, 790'FWL Sec 19, T-32-N, R-6-W

San Juan County, NM

Latitude 36° 58.1, Longitude 107° 30.3

Formation: Blanco Mesa Verde/Basin Dakota

Elevation: 6448'GL

Formation Tops:	Top	Bottom	Contents
Surface	San Jose	2260'	
Ojo Alamo	2260'	2370′	aquifer
Kirtland	2370′	2771'	
Fruitland	2771'	3120'	gas
Pictured Cliffs	3120'	3420'	gas
Lewis	3420'	4185'	gas
Intermediate TD	3520'		
Huerfanito Bentonite	4185'	4588'	gas
Chacra	4588'	5360'	
Massive Cliff House	5360'	5430'	gas
Menefee	5430'	5640'	gas
Massive Point Lookout	5640′	6100'	gas
Mancos Shale	6100'	6970′	
Gallup	6970 <i>'</i>	7730′	gas
Greenhorn	7730'	7785'	gas
Dakota	7785′		gas
TD (4 1/2"liner)	8020'		

#### Logging Program:

Cased hole - CBL - TD to 200' above TOC, GR/CNL across MV/Dk

#### Mud Program:

Interval	<u>Type</u>	<u>Weight</u>	<u>Vis.</u>	Fluid Loss
0- 200'	Spud	8.4-9.0	40-50	no control
200-3520'	LSND	8.4-9.0	30-60	no control
3520-8020'	Gas	n/a	n/a	n/a

Pit levels will be visually monitored to detect gain or loss of fluid control.

#### Casing Program (as listed, the equivalent, or better):

<u> Hole Size</u>	Depth Interval	<u>Csq.Size</u>	Wt.	<u>Grade</u>
12 1/4"	0' - 200'	9 5/8"	32.3#	WC-50
8 3/4"	0' - 3520'	7"	20.0#	J-55
6 1/4"	3420' - 8020'	4 1/2"	10.5#	J-55

#### Tubing Program:

0' - 8020' 2 3/8" 4.70# EUE

#### BOP Specifications, Wellhead and Tests:

#### Surface to Intermediate TD -

11" 2000 psi minimum double gate BOP stack (Reference Figure #1). After nipple-up prior to drilling out surface casing, rams and casing will be tested to 600 psi for 30 minutes.

#### Intermediate TD to Total Depth -

11" 2000 psi minimum double gate BOP stack (Reference Figure #1). After nipple-up prior to drilling out intermediate casing, rams and casing will be tested to 1500 psi for 30 minutes.

#### Surface to Total Depth -

2" nominal, 2000 psi minimum choke manifold (Reference Figure #3).

#### Completion Operations -

7 1/16" 2000 psi double gate BOP stack (Reference Figure #2). After nipple-up prior to completion, pipe rams, casing and liner top will be tested to 2000 psi for 15 minutes.

#### Wellhead -

9 5/8" x 7" x 2 3/8" x 3000 psi tree assembly.

#### General -

- Pipe rams will be actuated once each day and blind rams will be actuated once each trip to test proper functioning.
- An upper kelly cock valve with handle available and drill string valves to fit each drill string will be available on the rig floors at all times.
- BOP pit level drill will be conducted weekly for each drilling crew.
- All BOP tests and drills will be recorded in daily drilling reports.
- Blind and pipe rams will be equipped with extension hand wheels.

#### Cementing:

9 5/8" surface casing - cement with 163 sx Class "B" cement with 1/4# flocele/sx and 2% calcium chloride (188 cu.ft. of slurry, 200% excess to circulate to surface). WOC 8 hrs. Test casing to 600 psi for 30 minutes.

Saw tooth guide shoe on bottom. Bowspring centralizers will be run in accordance with Onshore Order #2.

#### 7" intermediate casing -

Lead w/283 sx Class "B" w/3% metasilicate, 10# gilsonite/sx and 1/2# flocele/sx. Tail w/90 sx 50/50 Class "B" Poz w/2% calcium chloride, 2% gel, 1/2# flocele/sx, 10# gilsonite/sx (925 cu.ft. of slurry, 75% excess to circulate to surface.) WOC minimum of 8 hours before drilling out intermediate casing. If cement does not circulate to surface, a CBL will be run during completion operations to determine TOC. Test casing to 1500 psi for 30 minutes.

Cement nose guide shoe on bottom with float collar spaced on top of shoe joint. Bowspring centralizers spaced every other joint off bottom, to the base of the Ojo Alamo at 2370'. Two turbolating centralizers at the base of the Ojo Alamo at 2370'. Bowspring centralizers spaced every fourth joint from the base of the Ojo Alamo to the base of the surface casing.

4 1/2" Production Liner -

Cement to cover minimum of 100' of 4 1/2" x 7" overlap. Cement with 497 sx 50/50 Class "B" Poz with 2% gel, 1/4# flocele/sx, 5# gilsonite/sx, and 0.4% fluid loss additive (661 cu.ft., 40% excess to cement 4  $1/2" \times 7"$  overlap). WOC a minimum of 18 hrs prior to completing.

Cement float shoe on bottom with float collar spaced on top of shoe joint.

To facilitate higher hydraulic stimulation completion Note: work, no liner hanger will be used. Instead, a long string of 4 1/2" casing will be run and cemented with a minimum of 100' of cement overlap between the 4 1/2" x 7" casing strings. After completion of the well, a 4 1/2" CIBP will be set above the last fracturing job to cut and pull the 4 1/2" casing above the 7" casing shoe. The 4 1/2" bridge plug will then be milled and tubing will be run for completion.

#### Special Drilling Operations (Gas/Mist Drilling):

The following equipment will be operational while gas/mist drilling:

- An anchored blooie line will be utilized to discharge all cuttings and circulating medium to the blow pit a minimum of 100' from the
- The blooie line will be equipped with an automatic igniter or pilot light.
- Compressors will be located a minimum of 100' from the wellhead in the opposite direction from the blooie line.
- Engines will have spark arresters or water cooled exhaust.
- Deduster equipment will be utilized.
- The rotating head will be properly lubricated and maintained.
- A float valve will be utilized above the bit.
- Mud circulating equipment, water, and mud materials will be sufficient to maintain control of the well.

#### Additional Information:

- The Dakota and Mesa Verde formations will be completed and commingled.
- No abnormal temperatures or hazards are anticipated.
- Anticipated pore pressures are as follows:

Fruitland Coal 300 psi Pictured Cliffs 500 psi 700 psi Mesa Verde Dakota 2500 psi

- Sufficient LCM will be added to the mud system to maintain well control, if lost circulation is encountered.
- The west half is dedicated to the Dakota and the Mesa Verde in this well.

• This/gas is dedarated.

Drilling Engineer

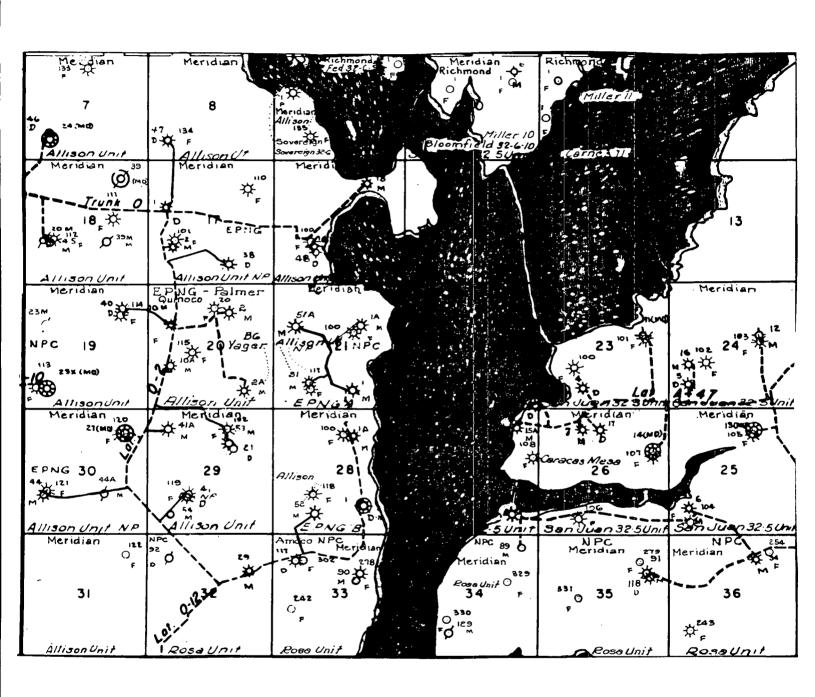


## Allison Unit #23M Multi-Point Surface Use Plan

- 1. Existing Roads Refer to Map No. 1. Existing roads used to access the proposed location will be properly maintained for the duration of the project. Bureau of Land Management right-of-way has been applied for as shown on Map No. 1.
- 2. Planned Access Road Refer to Map No. 1. None required.
- 3. Location of Existing Wells Refer to Map No. 1A.
- 4. Location of Existing and/or Proposed Facilities if Well is Productive
  - a. On the Well Pad Refer to Plat No. 1, anticipated production facilities plat.
  - b. Off the Well Pad Anticipated pipeline facilities as shown on the attached plat from Williams Field Service.
- Location and Type of Water Supply Water will be hauled by truck for the proposed project and will be obtained from Middle Mesa located SW Section 5, T-30-N, R-7-W, New Mexico
- 6. Source of Construction Materials If construction materials are required for the proposed project, such materials will be obtained from a commercial quarry.
- 7. Methods of Handling Waste Materials All garbage and trash materials will be removed from the site for proper disposal. A portable toilet will be provided for human waste and serviced in a proper manner. If liquids are left in the reserve pit after completion of the project, the pit will be fenced until the liquids have had adequate time to dry. The location clean-up will not take place until such time as the reserve pit can be properly covered over to prevent run-off from carrying waste materials into the watershed. Reserve pits will be lined as needed with either 12 mil bio-degradable plastic liner or a bentonite liner. All earthen pits will be so constructed as to prevent leakage from occurring; no earthen pit will be located on natural drainage. Generation of hazardous waste is not anticipated. Federal regulations will be adhered to regarding handling and disposal of such waste if so generated.
- 8. Ancillary Facilities None anticipated.
- 9. Wellsite Layout Refer to the location diagram and to the wellsite cut and fill diagram (Figure No. 4). The blow pit will be constructed with a 2'/160' grade to allow positive drainage to the reserve pit and prevent standing liquids in the blow pit.

- 10. Plans for Restoration of the Surface - After completion of the proposed project, the location will be cleaned and leveled. The location will be left in such a condition that will enable reseeding operations to be carried out. Seed mixture as designated by the responsible government agency will be used. The reseeding operations will be performed during the time period set forth by the responsible government agency. The permanent location facilities will be painted as designated by the responsible government agency.
- 11. Surface Ownership - LeRoy Self
- 12. Environmental stipulations as outlined by the responsible Other Information government agency will be adhered to. Refer to the archaeological report for a description of the topography, flora, fauna, soil characteristics, dwellings, historical and cultural sites.
- 13. Operator's Representative and Certification - Burlington Resources Oil & Gas Company Regional Drilling Manager, Post Office Box 4289, Farmington, NM 87499, telephone (505) 326-9700. 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 Burlington Resources Oil and Gas Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

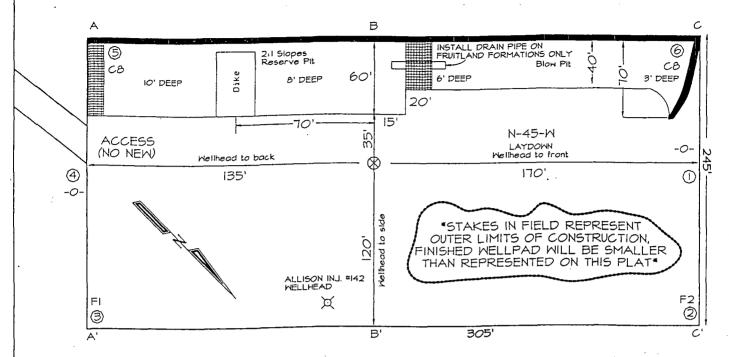
## BURLINGTON RESOURCES OIL & GAS COMPANY ALLISON UNIT #23M 1940' FNL & 790' FWL, SECTION 19, T32N, R6W, N.M.P.M. SAN JUAN COUNTY, NEW MEXICO APD MAP #I NO NEW CONSTRUCTION SWNW SECTION 19, T32N, R6W Mackey Place 0 õ ۵ EXISTING R.O.W. 0 Ulibarri Place



MERIDIAN OIL INC.
Pipeline Map
T-32-N, R-06-W
San Juan County, New Mexico
Allison Unit #23M
Map lA

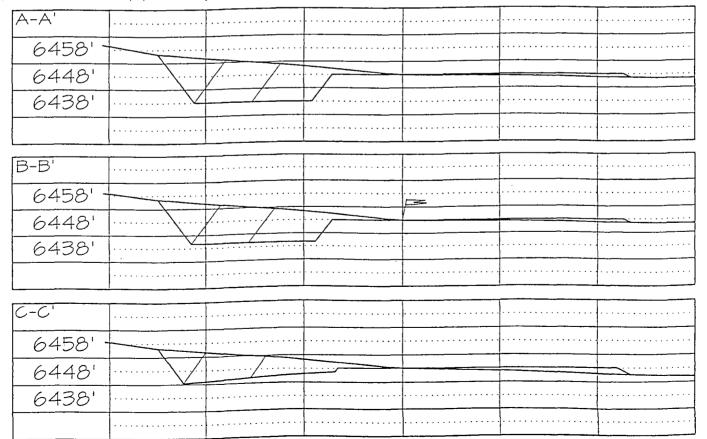
## PLAT #1

## BURLINGTON RESOURCES OIL & GAS COMPANY ALLISON UNIT #23M, 1940' FNL & 790' FWL SECTION 19, T32N, R6W, NMPM, SAN JUAN COUNTY, NEW MEXICO GROUND ELEVATION: 6448' DATE: APRIL 20, 1998



245' x 305' = 1.71 ACRES

Reserve Pit Dike: to be 8' above Deep side (overflow - 3' wide and 1' above shallow side). Blow Pit: overflow pipe halfway between top and bottom and to extend over plastic liner and into blow pit.



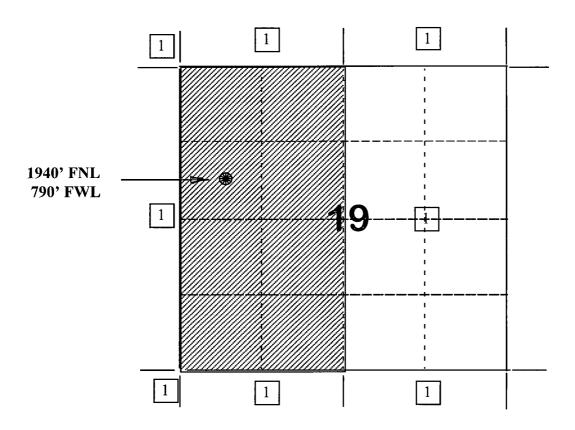
Note: Contractor should call One–Call for location of any marked or unmarked buried pipelines or cables on well pad and/or access road at least two (2) working days prior to construction

#### **BURLINGTON RESOURCES OIL AND GAS COMPANY**

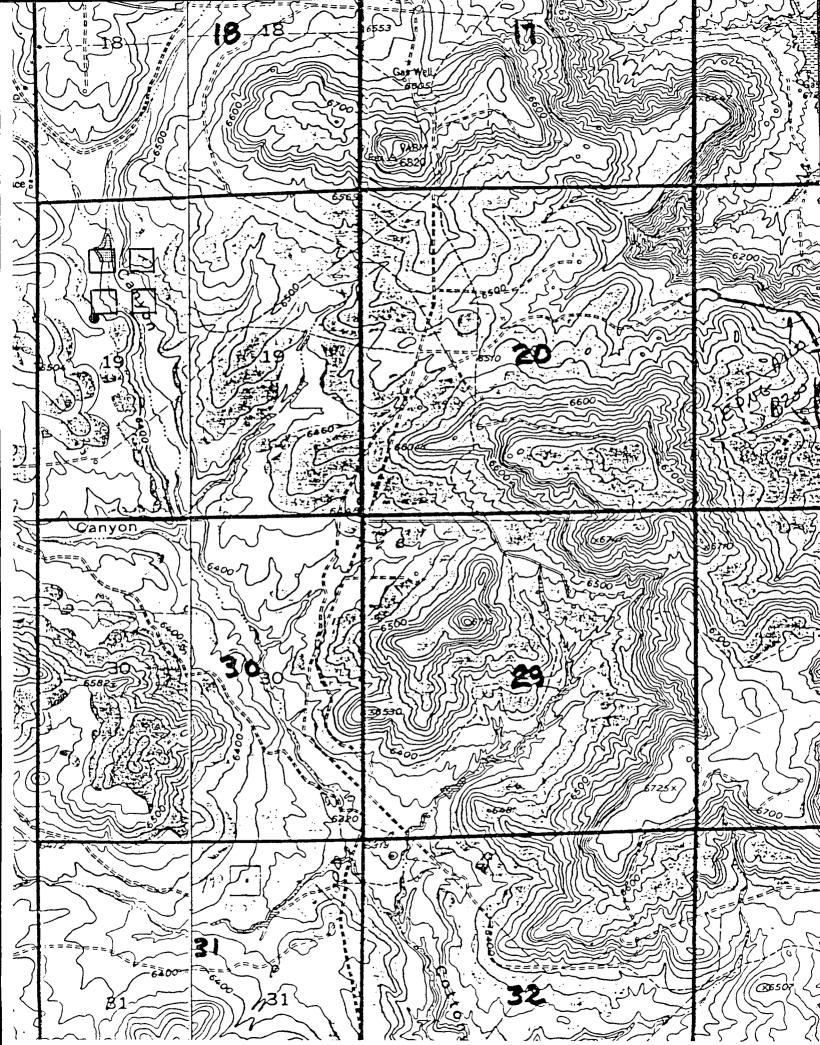
# Allison Unit #23M OFFSET OPERATOR/OWNER PLAT Nonstandard Location

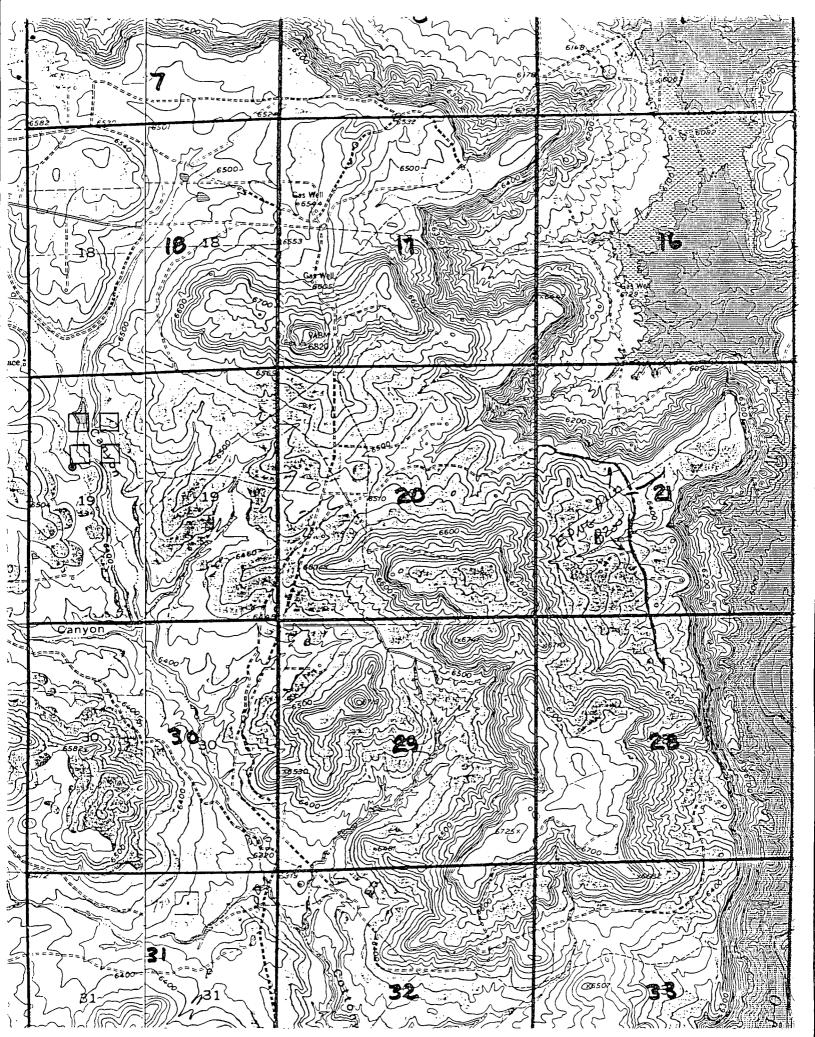
### Mesaverde / Dakota Formations Well

Township 32 North, Range 6 West



1) Burlington Resources





CMD : OG5SECT

ONGARD INQUIRE LAND BY SECTION

07/06/98 15:03:19

OGOIV -EMEC PAGE NO: 1

Sec : 19 Twp : 32N Rng : 06W Section Type : NORMAL

1 39.50	C 40.00	B 40.00	A   40.00
Federal owned U	     Federal owned   U 	   Federal owned   U 	   Federal owned   U   A
39.30	F 40.00	G 40.00	H 40.00
Federal owned U A	   Federal owned   U 	   Federal owned   U	   Federal owned   U
M0002: This PF01 HELP PF02 PF07 BKWD PF08 FW	is the first page PF03 EXIT D PF09 PRINT	PF04 GoTo PF05 PF10 SDIV PF11	PF06 PF12

CMD : OG5SECT

ONGARD INQUIRE LAND BY SECTION

07/06/98 15:03:04

OGOIV -EMEC PAGE NO: 2

Sec : 19 Twp : 32N Rng : 06W Section Type : NORMAL

3 39.11	K   40.00 	J   40.00 	I   40.00
Federal owned U	   Federal owned   U	   Federal owned   U	   Federal owned   U   A A
4 38.92	N 40.00	40.00	P 40.00
Federal owned U A A	Federal owned U	   Federal owned   U 	Federal owned   U   A
PF01 HELP PF02 PF07 BKWD PF08 F	PF03 EXIT WD PF09 PRINT	PF04 GoTo PF05 PF10 SDIV PF11	PF06 PF12