	orm 3160-5 TES OF THE INTERIOR AND MANAGEMENT				
Sundry Notices and R	eports on Wells				
<b>Type of Well</b> GAS			5. 6.	Lease Number NMSF-077648 If Indian, All. or Tribe Name	
Name of Operator BURLINGTON RESOURCES OF	IL & GAS COMPANY LP		7.	Unit Agreement Name	
Address & Phone No. of O	perator		/ - 8.	Well Name & Number Davis 10M	
PO Box 4289, Farmington,	NM 87499 (505) 326-9700	Call of 12 VC share	9.	API Well No.	
Location of Well, Footage, Sec.12, T-31-N, R-12-W, NN	MPM		- 10.	30-045-33127 Field and Pool	
845 FSL, 1645 FFL	X		11. <b>San</b>	Blanco MV/Basin DK County and State Juan County, NM	
2. CHECK APPROPRIATE I	BOX TO INDICATE NATU	RE OF NOTICE, REPORT, O	THER	DATA	
ype of Submission: ☑ Notice of Intent	Type of Action:	Change of Plans	ØC	ther: Csg & Cmt Change	
	Recompletion     Plugging     Casing Repair     Altering Casing	<ul> <li>New Construction</li> <li>Non-Routine Fracturing</li> <li>Water Shut-off</li> <li>Conversion to Injection</li> </ul>			
<ul> <li>Bescribe Proposed or Com</li> <li>It is intended to change the</li> </ul>	Plugging Casing Repair Altering Casing Pluged Operations Production Casing on the s	Non-Routine Fracturing Water Shut-off	0'-200' d Opera	and the Intermediated Cas ations Plan.	
Final Abandonment Describe Proposed or Com It is intended to change the from 120'-3061' TO 120' It is pace for Federal of State C his space for Federal of State C	Plugging Casing Repair Altering Casing apleted Operations Production Casing on the s 4681'. The Cementing will regoing is true and correct. Frances Bond Office use)	Non-Routine Fracturing Water Shut-off Conversion to Injection           Subject well from 0'-120' To 0'           I be changed as per the attache           I be changed as per the attache           Title Regulatory Spectory	d Opera	ations Plan.	

# **OPERATIONS PLAN**

<u>Well Name:</u> Location:

DAVIS 10M 840' FSL & 1630' FWL, Section Sec 12 T31N R12W San Juan County, New Mexico

Formation: Elevation: Basin Dakota/Blanco Mesaverde 6239' GL

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Kirtland       1146'       2591'       gas         Fruitland Coal       2591'       2786'       gas         Pictured Cliffs       2786'       2961'       gas         Lewis       2961'       3471'       gas         Huerfanito Bentonite       3471'       4356'       gas         Massive Cliff House       4356'       4531'       gas         Massive Cliff House       4356'       4531'       gas         Mancos Shale       5088'       5478'       gas         Mancos Shale       5478'       6421'       gas         Opper Gallup       6421'       7143'       gas         Graenos       7198'       7256'       gas         Two Wells       7256'       7333'       gas         Paguate       7330'       7380'       gas	Formation Tops:	Top	Bottom	<u>Contents</u>
kirtland       1146'       2591'       gas         Fruitland Coal       2591'       2786'       gas         Pictured Cliffs       2786'       2961'       gas         Lewis       2961'       3471'       1         Huerfanito Bentonite       3471'       1       1         Chacra       3871'       4356'       gas         Massive Cliff House       4356'       4531'       gas         Menefee       4531'       5088'       gas         Mancos Shale       5478'       6421'       1         Upper Gallup       6421'       7143'       gas         Graneros       7198'       7256'       gas         Two Wells       7256'       7333'       gas         Paguate       7330'       7380'       gas	Surface	San Jose	1063'	
Fruitland Coal       2591'       2786'       gas         Pictured Cliffs       2786'       2961'       gas         Lewis       2961'       3471'       4356'       gas         Huerfanito Bentonite       3471'       4356'       gas         Massive Cliff House       4356'       4531'       gas         Massive Cliff House       4356'       4531'       gas         Mancos Shale       5088'       5478'       gas         Mancos Shale       5478'       6421'       143'         Upper Gallup       6421'       7143'       gas         Graenos       7198'       7256'       gas         Two Wells       7256'       7333'       gas         Paguate       7330'       7380'       gas	ojo Alamo	1063'	1146'	aquifer
Fictured Cliffs       2786'       2961'       gas         Lewis       2961'       3471'         Huerfanito Bentonite       3471'       gas         Chacra       3871'       4356'       gas         Massive Cliff House       4356'       4531'       gas         Menefee       4531'       5088'       gas         Massive Point Lookout       5088'       5478'       gas         Mancos Shale       5478'       6421'       143'       gas         Greenhorn       7143'       gas       gas       356'       gas         Graneros       7198'       gas       36'       36'       36'         Ywo Wells       7256'       7333'       38'       36'       36'         Paguate       7330'       7380'       38'       36'       36'	Kirtland	1146'	2591'	gas
Lewis       2961'       3471'         Huerfanito Bentonite       3471'         Chacra       3871'       4356'       gas         Massive Cliff House       4356'       4531'       gas         Menefee       4531'       5088'       gas         Massive Point Lookout       5088'       5478'       gas         Mancos Shale       5478'       6421'       143'         Upper Gallup       6421'       7143'       gas         Greenhorn       7143'       7198'       gas         Graneros       7198'       7256'       gas         Two Wells       7256'       7333'       gas         Paguate       7333'       7380'       gas         Cubero       7380'       7420'       gas	Fruitland Coal	2591'	2786 '	gas
Huerfanito Bentonite3471'Chacra3871'4356'gasMassive Cliff House4356'4531'gasMenefee4531'5088'gasMassive Point Lookout5088'5478'gasMancos Shale5478'6421'7143'gasUpper Gallup6421'7143'gasGreenhorn7143'7198'gasGraneros7198'7256'gasTwo Wells7256'7333'gasPaguate7333'7380'gasCubero7380'7420'gas	Pictured Cliffs	2786 '	2961'	gas
Chacra       3871'       4356'       gas         Massive Cliff House       4356'       4531'       gas         Menefee       4531'       5088'       gas         Massive Point Lookout       5088'       5478'       gas         Mancos Shale       5478'       6421'       1         Upper Gallup       6421'       7143'       gas         Greenhorn       7143'       7198'       gas         Graneros       7198'       7256'       gas         Two Wells       7256'       7333'       gas         Paguate       7333'       7380'       gas         Cubero       7380'       7420'       gas	Lewis	2961'	3471'	
Massive Cliff House       4356'       4531'       gas         Menefee       4531'       5088'       gas         Massive Point Lookout       5088'       5478'       gas         Mancos Shale       5478'       6421'       1         Upper Gallup       6421'       7143'       gas         Greenhorn       7143'       7198'       gas         Graneros       7198'       7256'       gas         Two Wells       7256'       7333'       gas         Paguate       733'       7380'       gas         Cubero       7380'       7420'       gas	Huerfanito Bentonite	3471'		
Menefee       4531'       5088'       gas         Massive Point Lookout       5088'       5478'       gas         Mancos Shale       5478'       6421'       1         Upper Gallup       6421'       7143'       gas         Greenhorn       7143'       7198'       gas         Graneros       7198'       7256'       gas         Two Wells       7256'       7333'       gas         Paguate       733'       7380'       gas         Cubero       7380'       7420'       gas	Chacra	3871'	4356'	gas
Massive Point Lookout       5088'       5478'       gas         Mancos Shale       5478'       6421'         Upper Gallup       6421'       7143'       gas         Greenhorn       7143'       7198'       gas         Graneros       7198'       7256'       gas         Two Wells       7256'       7333'       gas         Paguate       7333'       7380'       gas         Cubero       7380'       7420'       gas	Massive Cliff House	4356 '	4531'	gas
Mancos Shale         5478'         6421'           Upper Gallup         6421 '         7143 '         gas           Greenhorn         7143 '         7198 '         gas           Graneros         7198 '         7256 '         gas           Two Wells         7256 '         7333 '         gas           Paguate         7333 '         7380 '         gas           Cubero         7380 '         7420 '         gas	Menefee	4531'	5088'	gas
Upper Gallup         6421'         7143'         gas           Greenhorn         7143'         7198'         gas           Graneros         7198'         7256'         gas           Two Wells         7256'         7333'         gas           Paguate         733'         7380'         gas           Cubero         7380'         7420'         gas	Massive Point Lookout	5088 '	5478'	gas
Greenhorn         7143'         7198'         gas           Graneros         7198'         7256'         gas           Two Wells         7256'         7333'         gas           Paguate         7333'         7380'         gas           Cubero         7380'         7420'         gas	Mancos Shale	5478'	6421'	
Graneros       7198'       7256'       gas         Two Wells       7256'       7333'       gas         Paguate       7333'       7380'       gas         Cubero       7380'       7420'       gas	Upper Gallup	6421'	7143'	gas
Two Wells     7256'     7333'     gas       Paguate     7333'     7380'     gas       Cubero     7380'     7420'     gas	Greenhorn	7143'	7198'	gas
Paguate         733'         7380'         gas           Cubero         7380'         7420'         gas	Graneros	7198'	7256'	gas
Cubero 7380' 7420' gas	Two Wells	7256'	7333 '	gas
	Paguate	7333 '	7380'	gas
	Cubero	7380'	7420'	gas
Encinal '420' 7468' gas	Encinal	7420'	7468'	gas
Total Depth: 7468' gas	Total Depth:	7468'		gas

## Logging Program;

Mud Logs/Coring/DST	
Mud logs - none	
Coring - none	
DST - none	
Open hole - none	
Cased hole - Gamma Ray, CCL, CBL - surface to TD	

## Mud Program:

<u>Interval</u>	<u>Type</u>	<u>Weight</u>	<u>Vis.</u>	<u>Fluid Loss</u>
0 - 200'	Spud MUD/Air/Air Mist	8.4 - 9.0	40 - 50	no control
120 - 4681'	LSND	8.4 - 9.0	30 - 60	no control
4681' - 7468 <i>'</i>	Air/Air Mist/Nitrogen	n/a	n/a	n/a

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# Operations Plan - DAVIS 10M

Casing Program (as listed, the equivalent, or better):				
<u>Hole Size</u>	<u>Depth Interval</u>	<u>Csg.Size</u>	<u>Wt.</u>	<u>Grade</u>
12 1/4"	0' - 200'	9 5/8"	32.3#	H-40
8 3/4"	0' - 4681'	7 "	20/23#	J-55
6 1/4"	0' - 7468'	4 1/2"	10.5#	J-55
<u>Tubing Program:</u>				
	<u>Depth Interval</u>	<u>Csg.Size</u>	<u>Wt.</u>	<u>Grade</u>
	0' - 7468	2 3/8"	4.7#	J-55
BOP Specifications, Wellhead	and Tests:			
Surface to Intermediate T	'D -			
	nimum double gate BOP			
	to drilling out surfa	ce casing, 🤉	asing will	be tested to
600 psi for 30	minutes.			
Intermediate TD to Total	Depth -			
11" 2000 psi mi	nimum double gate BOP	stack (Refere	ence Figure	#1). After
	to drilling out inter		ng, BOPE an	d casing will
be tested to 15	00 psi for 30 minutes.			
Surface to Total Depth -				
2" nominal, 200	0 psi minimum choke ma	nifold (Refe	ence Figur	e #3).
<u>Completion Operations -</u>				
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.			
<u>Wellhead -</u>				
9 5/8" x 7" x 4	½" x 2 3/8" x 2000 ps	i tree assemb	oly.	
<u>General -</u>				
	be actuated once each	-	l rams will	be actuated
once each trip	to test proper functio	ning.		

- 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 drill crew.
- All BOP tests & drills will be recorded in daily drilling reports.
- Blind and pipe rams will be equipped with extension hand wheels.

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#### **Operations Plan - DAVIS 10M**

#### <u>Cementing:</u>

9 5/8" surface casing -

**Pre-Set Drilled** - Cement with 23 sx Type I, II cement with 20% flyash mixed at 14.5 ppg, 1.61 cu ft per sack yield. (38 cu ft of slurry, bring cement to surface). Wait on cement for 24 hours for pre-set holes before pressure testing or drilling out from under surface. **Conventionally Drilled** - Cement with 147 sx Type III cement with 0.25 pps

Celloflake, 2% CaCl. (187 cu ft of slurry, 200% excess, bring cement to surface) Wait on cement for 8 hrs for conventionally set holes before pressure testing or drilling out from under surface. Wait on cement appropriate time until cement achieves 250 psi compressive strength at 60 degrees F. prior to nipple up of BOPE. Wait on cement for 8 hrs for conventionally set holes before pressure testing or drilling out from under surface. 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 with 416 sacks Premium Lite cement with 3% calcium chloride, 0.25 pps Celloflake, 5 pps LCM-1, 0.4% fluid loss, 0.4% sodium metasilicate. Tail w/90 sacks Type III cmt w/1% calcium chloride, 0.25 pps Celloflake, 0.2% fluid loss (1010 cu ft 50% excess to circulate to surface). WOC minimum of 8 hours before drilling out intermediate casing. If cement does not circulate to surface, a CBL or a temperature survey will be run to determine TOC. Test casing to 1500 psi for 30 minutes.

7" intermediate casing alternative two stage -

Stage collar set 300' above the top of the Fruitland. First stage: Lead w/195 sacks Premium Lite cement with 3% calcium chloride, .25 pps celloflake, 5 pps LCM-1, 0.4% fluid loss. Tail w/90 Type III cmt w/1% calcium chloride, 0.25 pps Celloflake, 0.2% fluid loss. Second stage: 221 sacks Premium Lite cement with 3% calcium chloride, .25 pps celloflake, 5 pps LCM-1, 0.4% fluid loss, 0.4% sodium metasilicate (1010 cu ft - 50% excess to circulate to surface).

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 @ 1146'. Two turbolating centralizers at the base of the Ojo Alamo 1146'. Bowspring centralizers spaced every fourth joint from the base of the Ojo Alamo to the base of the surface casing.

4 1/2" Production Casing -

Pump 180 sxs Premium Lite HS FM w/0.25 pps celloflake, 0.3% CD-32, 6.25 pps LCM-1, 1% fluid loss, 6% gel, 7 pps CSE (383 cu.ft., 30% excess to achieve 100' overlap in  $4-1/2" \ge 7"$  annulus). WOC a minimum of 18 hrs prior to completing.

#### **Operations Plan - DAVIS 10M**

## <u>Cementing:</u> <u>Continued</u>

Cement float collar stacked on top of float shoe.

Note: If open hole logs are run, cement volumes will be based on 25% excess over caliper volumes.

Cement nose guide shoe on bottom with float collar spaced on top of shoe joint. The liner hanger will have a rubber packoff.

• If hole conditions permit, an adequate water spacer will be pumped ahead of each cement job to prevent cement/ mud contamination or cement hydration.

## Special Drilling Operations (Air/Mist Drilling);

The following equipment will be operational while air/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 wellhead.
- 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.
- 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 Mesa Verde and Dakota formations will be completed and commingled.
- No abnormal temperatures or hazards are anticipated.
- Anticipated pore pressures are as follows:

300 psi
600 psi
700 psi
2000 psi

- Sufficient LCM will be added to the mud system to maintain well control, if lost circulation is encountered below the top of the Pictured Cliffs.
- The south half of Section 3 is dedicated to the Mesa Verde and Dakota.
- This gas is dedicated

Drilling Engineer

\$15/05

Date