

DATE IN 3.23.11	SUSPENSE	ENGINEER TW	LOGGED IN 3.23.11	TYPE IPI	APP NO: 1108232916
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ABOVE THIS LINE FOR DIVISION USE ONLY

## NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

1220 South St. Francis Drive, Santa Fe, NM 87505



RECEIVED  
2011 MAR 22  
Aspen 32 State Com #1  
30-015-34148

ASPEN 32 STATE COM #1

Order: SWD-1247-A

### ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

#### Application Acronyms:

[NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [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]  
[EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

#### [1] TYPE OF APPLICATION - Check Those Which Apply for [A]

- [A] Location - Spacing Unit - Simultaneous Dedication  
☐ NSL ☐ NSP ☐ SD

Check One Only for [B] or [C]

- [B] Commingling - Storage - Measurement  
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

- [C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery  
☐ WFX ☐ PMX ☐ SWD ☒ IPI ☐ EOR ☐ PPR

- [D] Other: Specify \_\_\_\_\_

#### [2] NOTIFICATION REQUIRED TO: - Check Those Which Apply, or ☐ 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] SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Mike Pippin		Petroleum Engineer	March 21, 2011
Print or Type Name	Signature	Title	Date
		mike@pippinllc.com	
		e-mail Address	

State  
Edg  
SWD-1247-A  
1640  
4187-50  
4137  
0.5

LIME ROCK RESOURCES, L.P.  
Mike Pippin  
3104 N. Sullivan Avenue  
Farmington, NM 87401  
505-327-4573 (phone) mike@pippinllc.com

March 21, 2011

Terry G. Warnell  
New Mexico Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, NM 87505

**RE: Injection Pressure Increase Request**  
Administrative Order SWD-1247-A  
ASPEN 32 STATE COM #1  
API#: 30-015-34148  
Unit Letter "J" Section 32 T17S R28E  
Eddy County, New Mexico

Dear Mr. Warnell:

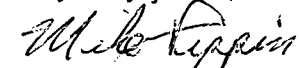
By administrative order SWD-1247-A, dated February 23, 2011, the NMOCD authorized water injection into Aspen 32 State Com #1 (API No. 30-015-34148) for the disposal of produced water. The order provides for a wellhead injection pressure of "no more than 1640 psi". Lime Rock believes that this maximum pressure of 1640 psi is significantly below the formation frac pressure.

The disposal formation in this well is extremely tight. On 3/7/11, a step rate test was run to determine the actual formation frac pressure. The formation did not break. Therefore, the test was conducted again on 3/15/11 with a larger pump truck. The formation pressure did not break at a maximum surface pressure of 4187 psi (bottom hole pressure of 5908 psi), which indicates that the formation frac pressure was not exceeded at that point. Therefore, the actual formation frac pressure is higher than a surface pressure of 4187 psi. A summary of the step rate test data from Cardinal Surveys is attached.

Lime Rock Resources therefore requests that the maximum wellhead injection pressure be increased to at least 4187 psi.

Please contact me at 505-327-4573 should you have any questions.

Very truly yours,



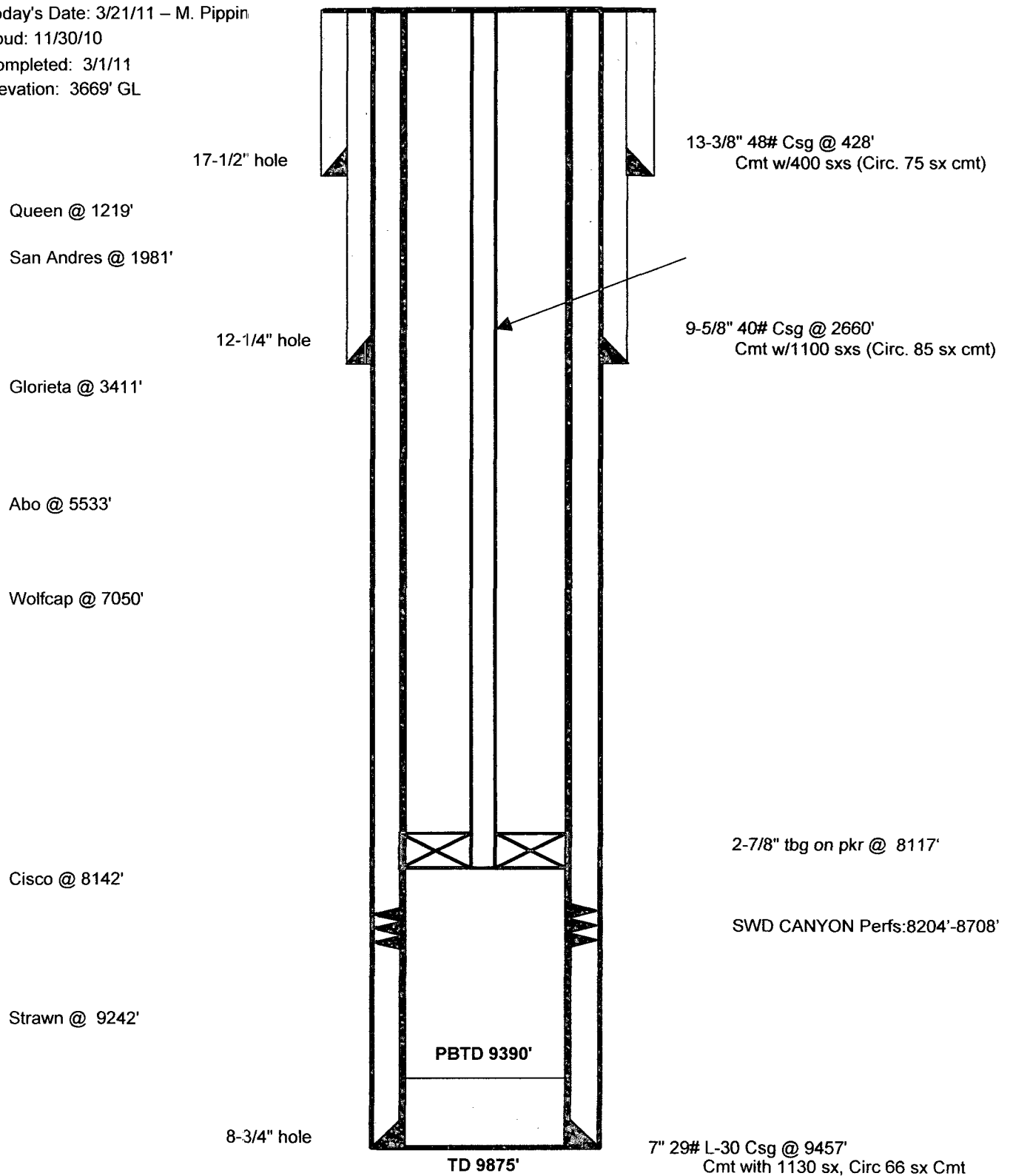
Mike Pippin P.E.  
Petroleum Engineer

Enclosures

# ASPEN 32 STATE COM #1

Current  
SWD Canyon, (96148)  
(J) Section 32, T-17-S, R-28-E, Eddy County, NM

Today's Date: 3/21/11 – M. Pippin  
Spud: 11/30/10  
Completed: 3/1/11  
Elevation: 3669' GL



## Step Rate Test



### Cardinal Surveys Company

15-Mar-11

#### Lime Rock Resources

Well: Aspen 32 State Com No. 1

Field;

County: Eddy County NM

SC59528

File No. 20,196

Downhole PSI Tool Ser. No. CSC2601  
Surface PSI Gauge Ser. No. 10213  
Tool @ 8,270'

	Start	End	Rate
1	7:26 AM	8:30 AM	0 8,270'
2	8:30 AM	9:00 AM	500
3	9:00 AM	9:30 AM	1000
4	9:30 AM	10:00 AM	1500
5	10:00 AM	10:30 AM	2000
6	10:30 AM	11:00 AM	3000
7	11:00 AM	11:30 AM	4000
8	11:30 AM	12:00 PM	5000
9	12:00 PM	12:30 PM	6000
10	12:30 PM	1:00 PM	7000
11	1:00 PM	1:30 PM	8000
12	1:30 PM	2:00 PM	9000
13	2:00 PM	2:15 PM	0 15 Min. Fall Off
14			
15			
16			
17			
18			

Step Rate Test  
15-Mar-11

Enervest Operating LLC  
Well: Aspen 32 State Com. No. 1  
Field:  
Location: Eddy County, New Mexico



	S Time	E Time	D Time Min	Last Rate BPD	Step BPD	BHP PSIA	Surf PSIA	Cum BBL	Delta BBL	Avg. BPD	Lower Trend	Upper Trend
1	7:26 AM	8:30 AM	64	0	0	3779.3	305.4	0	0	0		
2	8:30 AM	9:00 AM	30	500	500	3864.7	389.7	13.5	13.5	648		
3	9:00 AM	9:30 AM	30	1000	100	3945	501.5	35.1	21.6	1037		
4	9:30 AM	10:00 AM	30	1500	500	4046.6	611.4	66.8	31.7	1522		
5	10:00 AM	10:30 AM	30	2000	500	4169.9	794.2	108.7	41.9	2011		
6	10:30 AM	11:00 AM	30	3000	1000	4356	1094.8	170	61.3	2942		
7	11:00 AM	11:30 AM	30	4000	1000	4556	1566.6	253.1	83.1	3989		
8	11:30 AM	12:00 PM	30	5000	1000	4862.9	2022.3	354	100.9	4843		
9	12:00 PM	12:30 PM	30	6000	1000	5131	2436	475.3	121.3	5822		
10	12:30 PM	1:00 PM	30	7000	1000	5398.4	3012.2	619.4	144.1	6917		
11	1:00 PM	1:30 PM	30	8000	1000	5671.7	3603.5	784.8	165.4	7939		
12	1:30 PM	2:00 PM	30	9000	1000	5908.5	4187	966.6	181.8	8726		
13	2:00 PM	2:15 PM	15	0	0	55065.6	1679.3	966.6	0	0		

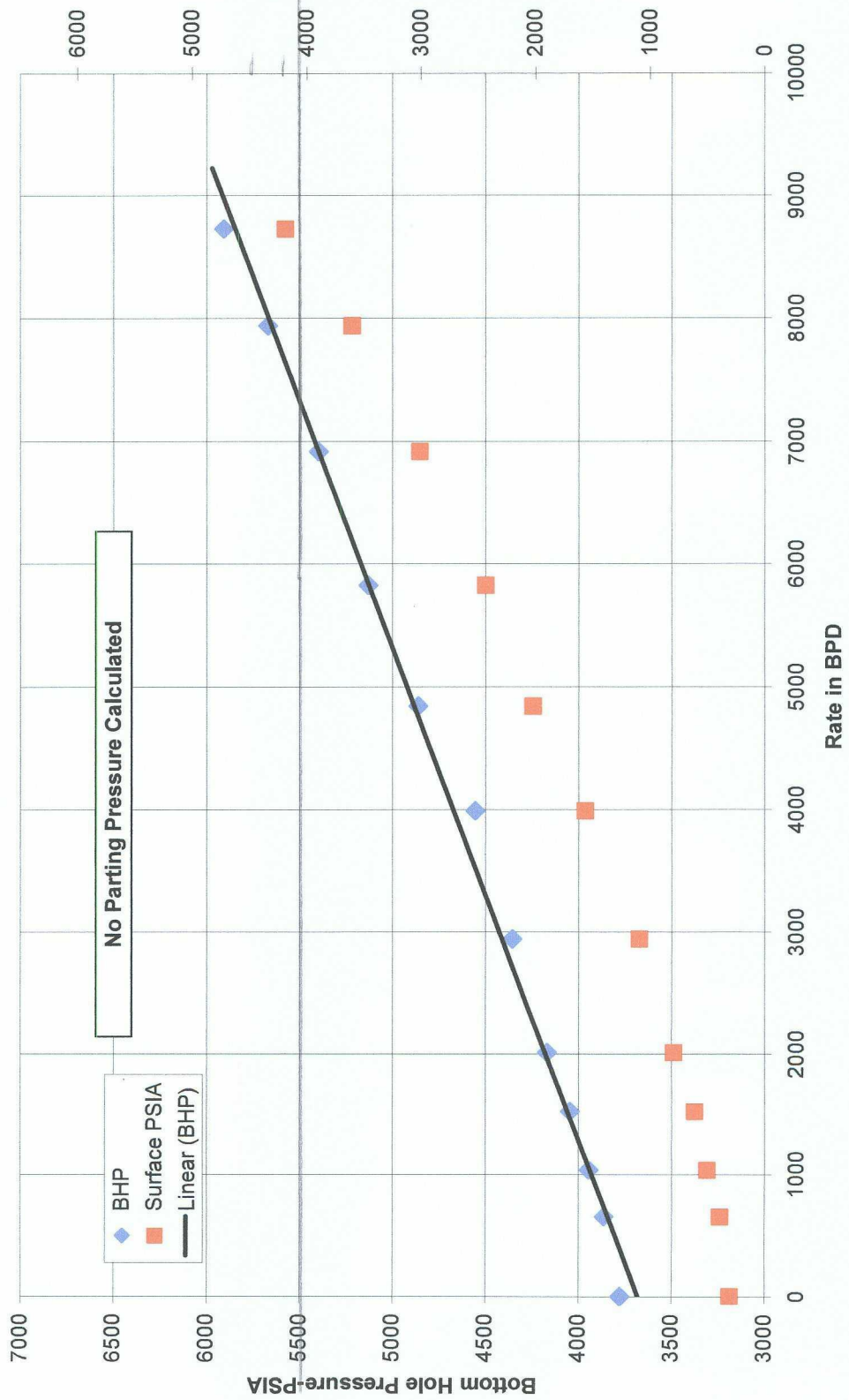
14  
15

Intersect  
BHP PSI

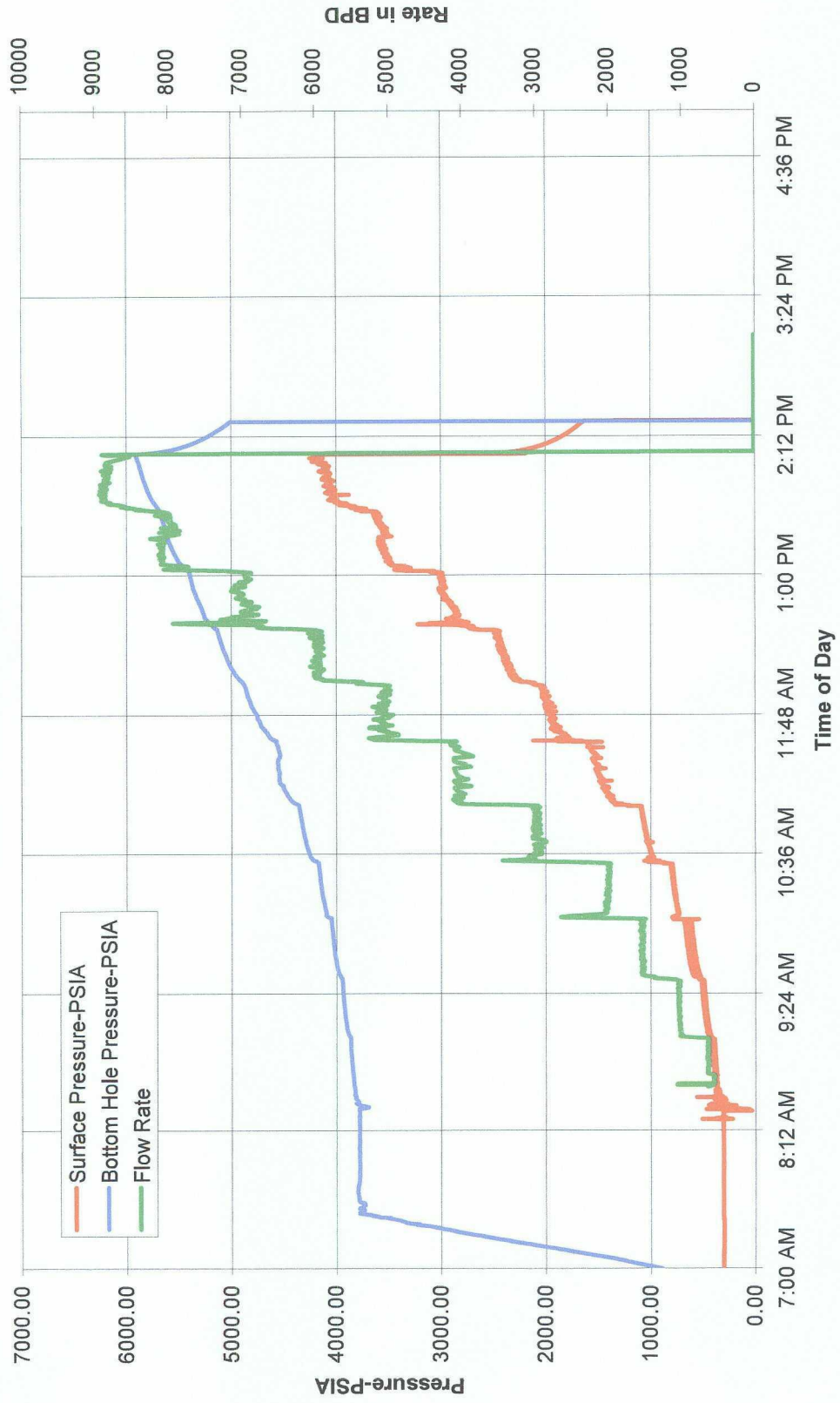
#DIV/0!  
#DIV/0!

BPD  
PSIA

Lime Rock Resources  
 Aspen 32 State Com No. 1  
 Stpe Rate Chart 15-Mar-11



Lime Rock Resources  
Aspen 32 State Com No. 1  
Total Data Chart 15-March-11



Submit 3 Copies To Appropriate District  
Office  
District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Ave., Artesia, NM 88210  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM  
87505

State of New Mexico  
Energy, Minerals and Natural Resources

Form C-103  
June 19, 2008

OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b> (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		WELL API NO. 30-015-34148
1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <u>SWD</u>		5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
2. Name of Operator <b>LIME ROCK RESOURCES A, L.P.</b>		6. State Oil & Gas Lease No.
3. Address of Operator c/o Mike Pippin LLC, 3104 N. Sullivan, Farmington, NM 87401		7. Lease Name or Unit Agreement Name <b>ASPEN 32 STATE COM</b>
4. Well Location Unit Letter <u>J</u> : <u>1370</u> feet from the <u>SOUTH</u> line and <u>1609</u> feet from the <u>EAST</u> line Section <u>32</u> Township <u>17-S</u> Range <u>28-E</u> NMPM Eddy County		8. Well Number #1
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3669' GL		9. OGRID Number 255333
		10. Pool name or Wildcat SWD Canyon (96148)

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	P AND A <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	MULTIPLE COMPL <input type="checkbox"/>	CASING/CEMENT JOB <input type="checkbox"/>	
DOWNHOLE COMMINGLE <input type="checkbox"/>			
OTHER: <input type="checkbox"/>		OTHER: Completion <input checked="" type="checkbox"/>	

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

On 12/15/10, PT 7" csg to 1000 psi for 30 min-OK. Perfed 7" csg in Canyon @ 8383'-85', 8392'-98', 8418'-24', 8433'-37', 8455'-57', 8466'-70', 8474'-78', 8498'-8502', 8504'-06', 8508'-10', 8524'-30', 8554'-56', 8566'-72', 8590'-92', 8596'-98', 8607'-09', 8620'-28', 8652'-54', 8667'-71', 8692'-96', 8704'-08' w/1-0.49" spf. Total 78 holes. Broke down new perfs w/4422 gal 15% NEFE acid & 156 perf balls. On 12/31/10, fraced Canyon w/175,091# 20/40 & 37,000# 20/40 Super LC sand in X-liked gel. CO after frac to 9162'. Test injectivity from 1/4/11 through 1/8/11.

On 1/11/11, Set 7" CBP @ 8370' & perfed additional Canyon @ 8204'-08', 8226'-30', 8232'-36', 8240'-43', 8252'-54', 8258'-62', 8264'-72', 8280'-8300', 8314'-16', 8322'-30', 8334'-40', 8354'-56' w/2-0.49" spf. Total 67 holes. Broke down perfs w/8000 gal 15% NEFE acid & 268 perf balls. Test injectivity from 1/13/11 through 2/19/11.

This will be a SWD well in the Canyon as per SWD-1247A.

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

SIGNATURE Mike Pippin TITLE Petroleum Engineer - Agent DATE 3/18/11

Type or print name Mike Pippin E-mail address: mike@pippinllc.com PHONE: 505-327-4573

**For State Use Only**

APPROVED BY: \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

Conditions of Approval (if any): \_\_\_\_\_



Submit 3 Copies To Appropriate District  
Office  
District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Ave., Artesia, NM 88210  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM  
87505

State of New Mexico  
Energy, Minerals and Natural Resources

Form C-103  
June 19, 2008

OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

<b>SUNDRY NOTICES AND REPORTS ON WELLS</b> (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		WELL API NO. 30-015-34148
1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <b>SWD</b>		5. Indicate Type of Lease STATE <input checked="" type="checkbox"/> FEE <input type="checkbox"/>
2. Name of Operator <b>LIME ROCK RESOURCES A, L.P.</b>		6. State Oil & Gas Lease No.
3. Address of Operator c/o Mike Pippin LLC, 3104 N. Sullivan, Farmington, NM 87401		7. Lease Name or Unit Agreement Name <b>ASPEN 32 STATE COM</b>
4. Well Location Unit Letter <b>J</b> : <b>1370</b> feet from the <b>SOUTH</b> line and <b>1609</b> feet from the <b>EAST</b> line Section <b>32</b> Township <b>17-S</b> Range <b>28-E</b> NMPM <b>Eddy</b> County		8. Well Number <b>#1</b>
11. Elevation (Show whether DR, RKB, RT, GR, etc.) <b>3669' GL</b>		9. OGRID Number <b>255333</b>
		10. Pool name or Wildcat <b>SWD Canyon (96148)</b>

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK <input type="checkbox"/>	PLUG AND ABANDON <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	CHANGE PLANS <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>	P AND A <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	MULTIPLE COMPL <input type="checkbox"/>	CASING/CEMENT JOB <input type="checkbox"/>	
DOWNHOLE COMMINGLE <input type="checkbox"/>			
OTHER: <input type="checkbox"/>		OTHER: <b>Completion II</b> <input checked="" type="checkbox"/>	

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

2/19/11: MIRUSU. Drill out CBP @ 8370' & CO to 9390'. Perf additional Canyon @ 8388'-8410', 8418'-37', 8454'-59', 8466'-80', 8495'-8510', 8524'-38', 8554'-57', 8563'-77', 8589'-99', 8606'-10', 8619'-30', 8651'-57', 8665'-72', 8684'-88', 8691'-96', 8703'-08' w/2-0.49" spf. On 2/26/11, landed 7" pkr on 2-7/8" 6.5# J-55 tbg @ 8117'. Released workover rig on 3/1/11. Started injectivity testing. We plan to run 3-1/2" 9.3# L-80 plastic lined SWD tbg w/plastic lined SWD pkr at a later date.

3/7/11: Ran step rate test on SWD well. Max surface pressure was 1750 psi, but no break over. Plan to re-test w/larger pump truck.

3/15/11: Ran step rate test on SWD well. Max surface pressure was 4187 psi, but no break over.

This will be a SWD well in the Canyon as per **SWD-1247A**.

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

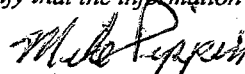
SIGNATURE Mike Pippin TITLE Petroleum Engineer - Agent DATE 3/18/11

Type or print name Mike Pippin E-mail address: mike@pippinllc.com PHONE: 505-327-4573

**For State Use Only**

APPROVED BY: \_\_\_\_\_ TITLE \_\_\_\_\_ DATE \_\_\_\_\_

Conditions of Approval (if any): \_\_\_\_\_

Submit To Appropriate District Office Two Copies District I 1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Rd., Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505	<b>State of New Mexico</b> <b>Energy, Minerals and Natural Resources</b>  <b>Oil Conservation Division</b> <b>1220 South St. Francis Dr.</b> <b>Santa Fe, NM 87505</b>	<b>Form C-105</b> July 17, 2008								
		1. WELL API NO. 30-015-34148								
		2. Type of Lease <input checked="" type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/> FED/INDIAN								
		3. State Oil & Gas Lease No.								
<b>WELL COMPLETION OR RECOMPLETION REPORT AND LOG</b>										
4. Reason for filing:  <input checked="" type="checkbox"/> <b>COMPLETION REPORT</b> (Fill in boxes #1 through #31 for State and Fee wells only)  <input type="checkbox"/> <b>C-144 CLOSURE ATTACHMENT</b> (Fill in boxes #1 through #9, #15 Date Rig Released and #32 and/or #33; attach this and the plat to the C-144 closure report in accordance with 19.15.17.13.K NMAC)		5. Lease Name or Unit Agreement Name <b>ASPEN 32 STATE COM</b>								
		6. Well Number: <b>1</b>								
7. Type of Completion: <input checked="" type="checkbox"/> NEW WELL <input type="checkbox"/> WORKOVER <input type="checkbox"/> DEEPENING <input type="checkbox"/> PLUGBACK <input type="checkbox"/> DIFFERENT RESERVOIR <input type="checkbox"/> OTHER <b>SWD-1247A</b>										
8. Name of Operator: <b>Lime Rock Resources A, L.P.</b>		9. OGRID: 255333								
10. Address of Operator: c/o Mike Pippin LLC, 3104 N. Sullivan, Farmington, NM 87401		11. Pool name or Wildcat: SWD Canyon (96148)								
12. Location	Unit Ltr	Section	Township	Range	Lot	Feet from the	N/S Line	Feet from the	E/W Line	County
Surface:	J	32	17-S	28-E		1370	South	1609	East	Eddy
BH:										
13. Date Spudded 11/30/10	14. Date T.D. Reached 12/6/10	15. Date Drilling Rig Released 12/8/10		16. Date Completed (Ready to Produce) 3/1/11			17. Elevations (DF and RKB, RT, GR, etc.): 3669' GR			
18. Total Measured Depth of Well 9875'		19. Plug Back Measured Depth 9390'		20. Was Directional Survey Made? Yes			21. Type Electric and Other Logs Run Ind, Micro, N/D, CBL, Dual Sp N.			
22. Producing Interval(s), of this completion - Top, Bottom, Name 8204'-8708' - Canyon										
<b>23. CASING RECORD (Report all strings set in well)</b>										
CASING SIZE	WEIGHT LB./FT.	DEPTH SET		HOLE SIZE		CEMENTING RECORD		AMOUNT PULLED		
13-3/8"	48#	428'		17-1/2"		400 sx		0'		
9-5/8"	40#	2660'		12-1/4"		1100 sx		0'		
7"	29# L-80	9457'		8-3/4"		600 sx 50/50 H		0'		
						+ 530 sx PVI				
<b>24. LINER RECORD</b>										
SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN		25. TUBING RECORD				
						SIZE	DEPTH SET	PACKER SET		
						2-7/8"	8117'	8117'		
26. Perforation record (interval, size, and number) 8204'-8708'. Total 542 0.49" holes.					27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC.					
					DEPTH INTERVAL		AMOUNT AND KIND MATERIAL USED			
					8204'-8708'		Treated w/4422 gal 15% NEFE acid & fraced w/175,091# 20/40 & 37,000# 12/20 Super LC sand in X-linked gel.			
							& 8000 gal 15% NEFE acid.			
<b>28. PRODUCTION</b>										
Date First Production READY		Production Method ( <i>Flowing, gas lift, pumping - Size and type pump</i> ) SWD				Well Status ( <i>Prod. or Shut-in</i> ) Shut-in				
Date of Test SWD	Hours Tested	Choke Size	Prod'n For Test Period:	Oil - Bbl	Gas - MCF	Water - Bbl.	Gas - Oil Ratio			
Flow Tubing Press.	Casing Pressure	Calculated 24-Hour Rate	Oil - Bbl.	Gas - MCF	Water - Bbl.	Oil Gravity - API - ( <i>Corr.</i> )				
29. Disposition of Gas ( <i>Sold, used for fuel, vented, etc.</i> ) SWD							30. Test Witnessed By: Jerry Smith			
31. List Attachments										
32. If a temporary pit was used at the well, attach a plat with the location of the temporary pit.										
33. If an on-site burial was used at the well, report the exact location of the on-site burial:										
Latitude _____ Longitude _____ NAD 1927 1983										
I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief										
Signature 		Printed Name Mike Pippin		Title: Petroleum Engineer		Date: 3/18/11				
E-mail Address: mike@pippinllc.com										

**ASPEN 32 STATE COM #1 (SWD-1247A)**

INDICATE FORMATION TOPS IN CONFORMANCE WITH GEOGRAPHICAL SECTION OF STATE

## OIL OR GAS SANDS OR ZONES

## IMPORTANT WATER SANDS

LITHOLOGY RECORD (Attach additional sheet if necessary)

From	To	Thickness In Feet	Lithology
			- On File -

From	To	Thickness In Feet	Lithology