

**HALLIBURTON**

# Job Log

3/10/2008

<b>Sales Order</b>		<b>Well</b>	
Number:	5740314	Ship To:	2621088 - KINDER MOR GOODMAN POINT 12, CORTEZ,
Primary BOM:	7550 - PSL ST RETRIEVABLE TOOL SERVICE - BOM	Description:	KINDER MORGAN INC
Sold To:	320986 - KINDER MORGAN INC	Address:	UNKNOWN, Montezuma, CO
Bill To:	5022219 - KINDER MORGAN ENERGY PARTNERS, CO2	Details:	Oil - Development Well - Land
Plant:	0204 - Farmington, NM USA 4109E Main	Well ID:	Y0JVE021GET4TAAA
PO/AE Num:	NA		

Operator	Date-Time	Activity	Remarks
Calkin, Richard C	3/09/2008 00:04	3 - JOB ACTIVITY	PKR SET W/ 18K ON IT START PUMPING W/ FRESH WATER TO GET INJECTION RATE
Calkin, Richard C	3/09/2008 08:30	1 - START JOB HOURS	LEAVE YARD
Calkin, Richard C	3/09/2008 11:00	2 - ON LOCATION	ARRIVED ON LOCATION, CHECK IN W/ WELLSITE SUPERVISOR, RIG STILL TOOH W/ DP.
Calkin, Richard C	3/09/2008 14:10	3 - JOB ACTIVITY	IN HOLE W/ 8 JTS OF 2 7/8" DP, PU PKR & TIH W/ 31 STDS OF 2 7/8 DP, & 92 STDS OF 3 1/2 DP
Calkin, Richard C	3/09/2008 17:30	3 - JOB ACTIVITY	ATTEND PRE JOB SAFETY MTG FOR RIG CREW CHANGE OUT.
Calkin, Richard C	3/09/2008 20:10	3 - JOB ACTIVITY	CAN'T GET DOWN, 20' OF BOTTOM RU RO CIRCULATE DOWN W/ RIG PUMP.
Calkin, Richard C	3/09/2008 20:32	3 - JOB ACTIVITY	CLOSE BYPASS ON PKR & CIRCULATE DOWN DP
Calkin, Richard C	3/09/2008 21:16	3 - JOB ACTIVITY	STILL CAN'T GET DOWN CIRCULATING @ 2 BPM
Calkin, Richard C	3/09/2008 21:20	3 - JOB ACTIVITY	GOT DOWN, EOT @ 8068', PKR @ 7804' KEEP CIRCULATING TO CLEAN UP HOLE, WHILE WE HAVE A PRE JOB SAFETY MTG
Calkin, Richard C	3/09/2008 21:46	3 - JOB ACTIVITY	RU ACID LINES TO FLOOR
Calkin, Richard C	3/09/2008 22:09	3 - JOB ACTIVITY	SD RIG PUMP, PUMPED @79 BBLs, RU ACID LINES TO DP.
Calkin, Richard C	3/09/2008 22:22	3 - JOB ACTIVITY	START PUMP FRESH WATER DOWN DP @ 2 BPM
Calkin, Richard C	3/09/2008 22:24	3 - JOB ACTIVITY	4 BBLs OF ACID GONE, FLUSH TO SPOT W/ @ 51 BBLs TO PUT ACID ON SPOT ( 7873- 8068' W/ TBG IN 7883- 8068 W/ TBG OUT)
Calkin, Richard C	3/09/2008 22:24	3 - JOB ACTIVITY	GOT FLD RETURNS TO PIT, SWITCH TO ACID
Calkin, Richard C	3/09/2008 23:22	3 - JOB ACTIVITY	51 BBLs GONE ACID ON SPOT, TOOH 3 STDS & SET PKR W/ 20K ON IT,
Calkin, Richard C	3/10/2008 00:04	3 - JOB ACTIVITY	PULLED 3 STDS OF 3 1/2" DP, EOT @7877' PKR @ 7614' SET PKR W/ 18K ON IT, RU ACID TO DP 7 PSI TEST TO 2000 PSI.
Calkin, Richard C	3/10/2008 00:28	3 - JOB ACTIVITY	CAN'T GET INJECTION RATE PREASSURED OUT, BLEED PSI OFF & SPOT ACID TO BOTTOM OF DP WHILE HOLDING BACK PREASSURE ON BS OF @ 500 PSI.
Calkin, Richard C	3/10/2008 01:08	3 - JOB ACTIVITY	52 BBLs ACID PUMPED TO BOTTOM OF DP, SHUT IN BS PSI = 1098, MONITOR PSI
Calkin, Richard C	3/10/2008 01:12	3 - JOB ACTIVITY	BS PSI DOWN TO 775, CLOSE HYDRILL, OPEN PIPE RAMS & SET PKR W/ 20K @ 7614'
Calkin, Richard C	3/10/2008 01:48	3 - JOB ACTIVITY	START PUMPING ON ACID.
Calkin, Richard C	3/10/2008 02:50	3 - JOB ACTIVITY	ACID GONE START FLUSH W/ FRESH WATER,
Calkin, Richard C	3/10/2008 03:22	3 - JOB ACTIVITY	SD FLUSHED 56.5 BBLs ISIP = 486 PSI, GET 15 MINUTE SHUT IN
Calkin, Richard C	3/10/2008 03:36	3 - JOB ACTIVITY	14 MINUTES PSI FELL OFF TO 0 PSI, RD ACID LINES, OPEN BS VALVE, OPEN PIPE RAMS, RELEASED PKR, & TOOH W/ PKR,

## 2.0 PUMPING SCHEDULE

### 2.1 Designed Pumping Schedule

Stage Number	Description	Flow Path	Fluid System	Clean Volume gal	Slurry Volume gal	Stage Time min
1	Acid	In	HCL HYDROCHLORI C ACID - SBM (341682)	172	172	172.00
2	Displacement	In	TREATED WATER	2163	2163	2163.00
3	Shut-In	In	HCL ACID 15% - SBM (27012)	0	0	0.00
4	Acid	In	HCL HYDROCHLORI C ACID - SBM (341682)	4828	4828	4828.00
5	Flush	In	TREATED WATER	2373	2373	2373.00
6	Shut-In	In	HCL ACID 15% - SBM (27012)	0	0	0.00
Total				9536	9536	9536.00

### 3.0 ACTUAL STAGE SUMMARY

#### 3.1 Stage Summary

Stage Number	Start Time	Max Treating Pressure psi	Avg Treating Pressure psi	Max Slurry Rate bpm	Avg Slurry Rate bpm	Avg Clean Rate bpm	Slurry Volume gal
1	22:05:43	112	97	1.6	1.5	1.5	185
2	22:08:38	213	180	2.2	2.1	2.1	2164
3	22:34:37	835	255	3.0	1.0	1.0	85
4	23:44:57	1676	491	2.1	1.5	1.5	5080
5	01:59:41	604	542	2.2	1.6	1.6	2373
6	02:39:44	0	0	0.0	0.0	0.0	0
Total							9888

Stage Number	Start Time	Clean Volume gal	Avg HHP hp
1	22:05:43	185	4
2	22:08:38	2164	9
3	22:34:37	85	7
4	23:44:57	5080	18
5	01:59:41	2373	21
6	02:39:44	0	0
Total		9888	

#### 3.2 Bottom Hole Stage Summary

Stage Number	Start Time	Max BH Pressure psi	Avg BH Pressure psi	Max BH Rate bpm	Avg BH Rate bpm
WB/SL	22:05:43	5821	3724	3.0	1.2
1	23:48:08	4124	4061	2.1	2.1
WB/SL	22:05:43	5821	3762	3.0	1.3
2	23:50:17	6530	4045	2.1	0.7
3	01:12:34	4605	4592	1.0	1.0
4	01:14:45	4571	4142	2.2	1.3

## 4.0 PERFORMANCE HIGHLIGHTS

### 4.1 Job Summary

<b>Start Time</b>	09-Mar-08 22:05:43	
<b>End Time</b>	10-Mar-08 02:52:06	
<b>Time</b>	286.39	min
<b>Pump Time</b>	147.93	min
<b>Max Treating Pressure</b>	1676	psi
<b>Avg Treating Pressure</b>	441	psi
<b>Avg Clean Rate</b>	1.6	bpm
<b>Clean Volume</b>	9888	gal
<b>Max Slurry Rate</b>	3.0	bpm
<b>Avg Slurry Rate</b>	1.6	bpm
<b>Slurry Volume</b>	9888	gal
<b>Max WH Rate</b>	3.0	bpm
<b>Avg WH Rate</b>	1.6	bpm
<b>WH Volume</b>	9887	gal
<b>Avg HHP</b>	17	hp
<b>BH Max Treating Pressure</b>	6530	psi
<b>BH Avg Treating Pressure</b>	4012	psi
<b>BH Max Rate</b>	3.0	bpm
<b>BH Avg Rate</b>	1.1	bpm
<b>BH Slurry Volume</b>	9935	gal
<b>BH Clean Volume</b>	9935	gal
<b>Load to Recover</b>	9888	gal



**4.2 Job Stage Log**

<b>Time</b>	<b>Description</b>	<b>Comment</b>	<b>Slurry Rate bpm</b>	<b>Treating Pressure psi</b>	<b>Job Slurry Vol gal</b>	<b>Hydraulic Power hp</b>
09-Mar-08 22:05:44	Stage 1	Acid	1.6	112	1	4
22:08:39	Stage 2	Displacement	1.5	82	185	3
22:34:38	Stage 3	Shut-In	0.0	7	2350	0
23:44:58	Stage 4	Acid	0.0	-0	2434	0
10-Mar-08 01:59:42	Stage 5	Flush	0.6	189	7515	3
02:39:45	Stage 6	Shut-In	0.0	252	9888	0

Time	Description	Comment	Slurry Rate bpm	Treating Pressure psi	Job Slurry Vol gal	Hydraulic Power hp
22:05:44	Stage 1	Acid	1.6	112	1	4
22:08:39	Stage 2	Displacement	1.5	82	185	3
22:33:32	ISIP		0.1	44	2349	0
22:34:38	Stage 3	Shut-In	0.0	7	2350	0
22:35:00	Other	Rig off wellhead to trip 6 joints of 3.5 in pipe	0.0	5	2350	0
23:14:21	Other	Rig back on to the wellhead	0.0	-2	2350	0
23:19:50	Pressure Test		0.0	-2	2350	0
23:44:58	Stage 4	Acid	0.0	-0	2434	0
23:56:32	Other	Lost prime on pump. Re-priming pump.	0.3	91	3276	1
10-Mar-08 00:03:12	Other	Restart pumping	0.0	1	3279	0
00:22:08	Other	Pumping 2 to 3 bbls of water to clear surface lines.	0.0	353	4610	0
00:37:46	Other	Pumped 2.68 bbls of water.	0.0	647	4722	0
00:57:40	Pressure Test		0.2	10	4726	0
01:59:42	Stage 5	Flush	0.6	189	7515	3
02:35:49	ISIP		0.1	486	9888	1
02:39:45	Stage 6	Shut-In	0.0	252	9888	0
02:40:49	Shut-In Pressure @ 5 Minutes		0.0	209	9888	0
02:45:49	Shut-In Pressure @ 10 Minutes		0.0	60	9888	0
02:49:03	Other		0.0	2	9888	0
02:52:06	End Job	Ending Job	0.0	4	9888	0
02:55:00	Post-Job Safety Meeting (Pre Rig-Down)		0.0	4	9888	0
03:00:00	Rig-Down Equipment		0.0	4	9888	0
03:45:00	Depart Location Safety Meeting		0.0	4	9888	0
04:00:00	Depart Location for Service Center or Other Site		0.0	4	9888	0

**4.4 ISIP**

Time	Description	Treating Pressure psi
22:33:32	ISIP	44
02:35:49	ISIP	486
02:40:49	Shut-In Pressure @ 5 Minutes	209
02:45:49	Shut-In Pressure @ 10 Minutes	60