

Form 3160-5 (August 2007)

## UNITED STATES

DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED	
OMB NO. 1004-0135	
Expires: July 31, 2010	
Lacca Carial Ma	

Expires: July 3
Lease Serial No.
NIMI COCO 40CD

SUNDRY Do not use thi abandoned we	5. Lease Serial No NMLC02943	5B			
SUBMIT IN TRI	7. If Unit or CA/A	greement, Name and/or No.			
Type of Well     Gas Well ☐ Oth	8. Well Name and J L KEEL B 27				
2. Name of Operator LINN OPERATING INC.	9. API Well No. 30-015-1037	2			
3a. Address 600 TRAVIS STREET, SUITE HOUSTON, TX 77002	5100	3b. Phone No. (include area cod Ph: 281-840-4272	e) 10. Field and Pool GRAYBURG	10. Field and Pool, or Exploratory GRAYBURG JACKSON;SR-Q-G-S	
4. Location of Well (Footage, Sec., T	., R., M., or Survey Description	)	11. County or Pari	sh, and State	
Sec 8 T17S R31E Mer NMP N 32.847290 N Lat, 103.888980			EDDY COUN	ITY, NM	
12. CHECK APPF	ROPRIATE BOX(ES) TO	O INDICATE NATURE OF	NOTICE, REPORT, OR OTI	HER DATA	
TYPE OF SUBMISSION TYPE OF ACTION					
☐ Notice of Intent	☐ Acidize	□ Deepen	☐ Production (Start/Resume)	■ Water Shut-Off	
_	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	■ Well Integrity	
Subsequent Report	Casing Repair	■ New Construction	☐ Recomplete	☐ Other	
☐ Final Abandonment Notice	□ Change Plans	Plug and Abandon	☐ Temporarily Abandon		
	☐ Convert to Injection	Plug Back	■ Water Disposal	iter Disposal	
13. Describe Proposed or Completed Ope If the proposal is to deepen directiona Attach the Bond under which the wor following completion of the involved testing has been completed. Final Ab determined that the site is ready for fi WIS SYSTEM IS NOT ACCEF	ally or recomplete horizontally, will be performed or provide operations. If the operation resonandonment Notices shall be filmal inspection.)	give subsurface locations and mea- the Bond No. on file with BLM/B sults in a multiple completion or re ed only after all requirements, inch	sured and true vertical depths of all pe IA. Required subsequent reports shall completion in a new interval, a Form iding reclamation, have been complete	ortinent markers and zones. be filed within 30 days 3160-4 shall be filed once ed, and the operator has	
DIAGRAM		RECLAMAT			
ACCEPTED FOR	R RECORD	RECEIVED	DUE//-5-		
JUL 29 :	2013 SANAGEMENT	JUL 3 1 2013 IMOCD ARTESIA	Accepted as to plug Liability under bond Surface restoration i	is completed.	
14. I heroby certify Analth Angeringlis	_Electronic Submission #2	213699 verified by the BLM W	ell Information System		
	For LINN O Committed to AFMSS for I	PERATING INC., sent to the ( processing by JOHNNY DICK)	Carlsbad ERSON on 07/18/2013 ()		
	CALLAHAN	* 1	COMPLIANCE SPECIALIST 3	<u> </u>	
Signature (Electronic S	ubmission)	Date 07/16/	2013		
	THIS SPACE FO	R FEDERAL OR STATE	OFFICE USE		
Approved By	Title		Date		
Conditions of approval, if any, are attached tertify that the applicant holds legal or eque which would entitle the applicant to condu	itable title to those rights in the	not warrant or subject lease Office			
Fitle 18 U.S.C. Section 1001 and Title 43 U.S.c. States any false, fictitious or fraudulent s				or agency of the United	



4/18/2013 - MIRU PU. CLEAN OUT CELLAR AROUND WELLHEAD. WO 8-1/4" WELLHEAD FLANGE. NDWH NU BOP CATCH PAN. RU WL TIH W/ 5 1/2" GAUGE RING. TAG UP @ 618' TOH W/ GAUGE RING. PICK UP WS 2 3/8" TIH OPEN END TAG FISH/ FILL @ 653'. TOH W/ 10 STDS RU MULE SHOE TIH TAG @653'. TOH W/ 10 STANDS RU MULE SHOE TIH TAG @ 653'. WORKED SHOE W/ TONGS MADE 1 1/2". RU PUMP TRUCK PUMP 400 BBLS WATER UNABLE TO WASH OUT FILL.

4/19/2013 - RIH W/ 5 1/2" PKR. TO 549' AND SET PKR. EST INJ. RATE OF 3 1/2 BPM @ 200 PSI. COMMUNICATED ABOVE PKR. UNLOADED 15 JTS. OF WS FROM TRUCK. MOVED TRUCK TO NEXT LOCATION. RD WL AND MOVED TO SAME LOCATION.

4/22/2013 - PU & RIH W/6-3 1/2" DC'S & 4 3/4" BIT. TAGGED @ 659'. RU REV UNIT. DRILLING OUT FILL FROM 659 - 966'. CONTACTED JIM AMOS W/BLM. HE APPROVED SETTING A 100 SX PLUG THERE. RD REV UNIT. POH LD DC'S & BIT. RIH W/TBG. COULDN'T GO DEEPER THAN 903'. MIXED & PUMPED 100 SX CLASS "C" CEMENT. POH STANDING TBG. BACK IN DERRICK. SI WELL.

4/23/2013 - OPENED UP WELL. SICP 0 PSI. RIH W/TBG. TO 903'. DIDN'T TAG ANYTHING. DROVE TRANSPORT TO WTR. STATION AND BROUGHT BACK LOAD OF FW. PUMPED 100 SX CLASS "C" CMT. @ 903' POH W/TBG. WOC. RIH W/ TBG. DIDN'T TAG. PUMPED 100 SX CLASS "C" CMT. AT 903'. POH W/TBG. LOAD CMT ONTO PUMP BULK.

4/24/2013 - HELD SAFETY MTG. OPENED UP WELL. RIH W/TBG. DIDN'T TAG CMT. JIM AMOS W/BLM APPROVED 100 SX PLUG W/LCM & 2% CACL. MIXED & PUMPED 100 SX CLASS "C" CEMENT W/LCM & 2% CACL @ 903'. WITNESSED BY CHERYL DE MONTIGNY W/BLM. POH STANDING BACK TBG. WOC DROVE TO WATER STATION AND LOADED FW. WOC DROVE TO WATER STATION AND LOADED FW. RIH W/TBG. & TAGGED PLUG @ 874'. CHERYL DE MONTIGNY W/BLM APPROVED 25 SX PLUG W/LCM & CACL MIXED & PUMPED S5 SX CLASS "C" CEMENT W/LCM & 2% CACL @ 874 - 627". WITNESSED BY CHERYL DE MONTIGNY W/BLM. POH STANDING BACK TBG. SION

4/25/2013 – HELD SAFETY MTG. OPENED UP WELL. RIH W/TBG. TO 874', DIDN'T TAG PLUG. CHERYL W/BLM APPROVED 35 SX PLUG W/2% CACL & LCM. MIXED & PUMPED 35 SX CLASS "C" CEMENT W/2% CACL & LCM FROM 874 - 627'. POH STANDING TBG. BACK. WOC REPAIRED HYDRAULIC LEAKS ON PUMP, REPAIRED BAD CYLINDER ON TYPE "B" SLIPS. RIH W/TBG. TO 874', DIDN'T TAG PLUG. CHERYL W/BLM APPROVED 100 SX PLUG W/CACL & LCM. MIXED AND PUMPED 100 SX CLASS "C" CEMENT W/2% CACL AND LCM FROM 874-627'. POH W/TBG. SION DROVE TO WATER STATION & LOADED FW. LOADED BULK CEMENT ON TRUCK. REPAIRED AIR LEAKS ON RIG. REPLACED TWO 1/4" VALVES.

4/26/2013 - OPENED UP WELL. RIH W/TBG. TAGGED PLUG @ 826'. JIM AMOS W/BLM ASKED TO PERFORATE @ 620'. PUMPED 30 BBLS. DOWNHOLE, BROKE CIRCULATION FROM PRODUCTION CSG. POH LD 10 JTS. & STOOD BACK REST. RU WL, PERF. CSG. @ 620'. RIH W/5 1/2" PKR. JIM AMOS W/BLM APPROVED SPOTTING 25 SX PLUG @ 826'.

POH LD PKR. RIH W/TBG. MIXED & PUMPED 25 SX CLASS "C" CEMENT W/2% CACL AND LCM. POH W/TBG. WOC. RIH W/TBG. AND TAGGED PLUG @ 826'. JIM AMOS APPROVED ANOTHER 25 SX PLUG. MIXED & PUMPED 25 SX CLASS "C" CEMENT W/2% CACL AND LCM FROM 826-630' POH SION.

4/29/2013 - RIH W/ TBG TO 826' TAGGED CMT PLUG. WOO. TALKED TO JIM AMOS W/ BLM. POUR PEA GRAVEL DOWN TBG @ 826' TO BUILD 5' BASE. PUMP 25 SKS CLASS C CMT. MIXED W/ 3% CC. WOC. POUR 2 SKS PEA GRAVEL DOWN TBG @ 826' POH W/ TBG. RIH W/ WL TO 826' TAG CMT. POH W/ WL. RIH W/ TBG TO 826' POUR 8 SKS PEA GRAVEL BUILD BASE. NO CHANGE. ORDER 10 YDS PEA GRAVEL FOR TUESDAY. SISD

4/30/2013 - POH W/ 1 JT TBG. POUR 2 5 GAL CANS OF PEA GRAVEL. RIH W/ WL TAG @ 826' REPEAT PROCESS 8 TIMES. TAG FILL @818' CALL BLM. JIM AMOS. SPOT 25 SKS CLASS C CMT W/ 3% CC. FROM 818'-571'. SPOT 25 SKS CLASS C CMT W/ 3% CC. FROM 818'-571'. RAISE TBG UP TO 620' REVERSE CIRC FROM 620- TO SURFACE. POH W/ TBG. DID NOT CIRC. PUMPED 30 BBLS. RIH W/ WL TAG @ 818' CALL BLM. JIM AMOS. POH W/ WL. PUR 2 FIVE GALLON BUCKETS OF PEA GRAVEL. RIH W/ WL TAG @ 792'. SPOT 25 SKS CLASS C CMT. W/ 3% CC & LCM. 792'-545' RAISE TBG UP TO 620' REVERSE CIRC W/ 30 BBLS. DID NOT CIRCULATE. POH W/ TBG. SISD

5/1/2013 - RIH W/TBG. TAGGED PLUG @ 697'. WOO. POH W/TBG. RIH W/PKR. MIXED & PUMPED 40 SX CLASS "C" CEMENT W/3% CACL FROM 620-520'. 0 PSI SI WELL. WOC DROVE TO WATER STATION & LOADED 120 BBLS. FW. POH W/PKR., RIH W/TBG. TAGGED PLUG @ 633'. JIM AMOS APPROVED ANOTHER SQUEEZE W/50 SX. POH W/TBG. RBIH W/PKR. & SET @ 372'. MIXED & PUMPED 50 SX CLASS "C" CEMENT W/3% CACL FROM 620-520'. 0 PSI SION

5/2/2013 – OPENED WELL. TRIED TO RELEASE PKR. PACKER STUCK. TRIED TO SHEAR PKR. BUT COULDN'T GET IT LOOSE. RIH WWL, TAGGED CMT. @ 367'. PKR. SET @ 372'. PKR. CEMENTED IN WELL. CONTACTED RON RAGLAND, BLM, & BCM. PULLED 10,000# ON TBG., TRIED TO SPIN TO THE RIGHT & UNSCREW FROM PKR. DIDN'T WORK. WORKED TBG. UP & DOWN, TRIED TO BACK OF TBG. TO THE LEFT. UNSCREWED 4 JTS. RIH & SCREWED BACK ON. TRIED TO UNSCREW AGAIN, UNSCREWED 5 JTS. RIH & SCREWED BACK ON. CALLED BCM. RU PRIMERCORD SHOT ON 5' X 3/4" ROD. RIH TO 367' WWL & SHOT. PULLED 20,000# ON TBG. & PUT RIGHT HAND TORQUE IN. SET OFF SHOT. POH WWL. TBG. DIDN'T COME FREE. WORKED TBG., TURNED TO RIGH. WORKED TBG. FROM 30,000# & DROPPED TO 0#. WOULDN'T COME FREE. RU ROPE SOCKET FOR TBG. CUTTER (JET CUTTER). FIRING SUB HAD SHORT IN IT, WOULD NOT TEST GOOD. PICKUP FIRING HEAD FROM RIG #1-ALSO HAD SHORT IN IT. CALLED RON & BLM. SION

5/3/2013 – OPENED UP WELL. PULLED 20,000# ON TBG. AND SET SLIPS. RUWL W/NEW ROPESOCKET & 2 3/8" TBG. CUTTER. RIH TO 365'. SHOT TBG. POH. WORKED TBG. UP & DOWN TO 40,000#. TURNED TBG. TO THE RIGHT. WOULDN'T COME FREE. JIM AMOS W/BLM APPROVED CUTTING 10' HIGHER @ 355'. PULLED 40,000# ON TBG. AND SET SLIPS. RU WL W/2 3/8" JET CUTTER, RIH & CUT TBG. @355'. POH W/WL. WORKED TBG. UP & DOWN NS DTO THE RIGHT BUT WOULDN'T COME FREE. PULLED STRECH ON TBG. AND SHOWS TO BE FREE AT 300'. CALLED JIM AMOS W/BLM. HE APPROVED CUTTING TBG. @ 275'. RU WL W/2 3/8" JET CUTTER. RIH & CUT TBG. @ 275'. POH W/WL. WORKED TBG. LOOSE AND POH LD 8 JTS. & 27' OF CUT JT. RIH W/TBG. IN DERRICK, LD TBG. RIH W/8 JTS. TBG. CLOSED BOP & 5 1/2" CSG. VALVES. PUMPED

DOWN TBG. & TRIED TO CIRCULATE TO SURFACE. PUMPED 30 BBLS. WATER BUT DIDN'T CIRCULATE. TIED ONTO SURFACE VALVES. PUMPED DOWN HOLE WITH 200 PSI. 2" PLUG ON SURFACE WELLHEAD BLEW OUT. REMOVED BAD 2" PLUG WITH A CHISEL & REPLACED W/GOOD PLUG. PUMPED DOWN SURFACE VALVE @ 250 PSI, BLEW HOLE IN SURFACE CASING.

5/6/2013 - OPENED UP WELL: JIM AMOS W/BLM APPROVED SQEEZING 30 SX W/3% CACL @ 250'. WO REGULATORY IN HOUSTON TO START PLUG. TIH W/TBG. TO 250'. MIXED & PUMPED 30 SX CLASS "C" W/2% CACL @ 80 PSI. SI W/0 PSI. POH W/TBG. WOC. RU WL RIH TO TAG PLUG. CEMENT NOT SET UP YET. WAITED 1 1/2 MORE HRS. CHERYL W/BLM APPROVED WAITING UNTIL MORNING TO TAG AGAIN.

5/7/2013 - OPENED WELL UP. RIH AND TAGGED PLUG @ 53'. POH. NOTIFIED JIM AMOS OF PLUG DEPTH. HE APPROVED PERFORATING @ 53' AND TRYING TO CIRC. CEMENT TO SURFACE. RU WL, RIH & PERF. @ 53'. POH. NOTIFIED JIM AMOS OF PLUG DEPTH. HE APPROVED PERFORATING @ 53' AND TRYING TO CIRC. CEMENT TO SURFACE. RU WL, RIH & PERF. @ 53'. POH. RIH W/PKR. & SET @ 5'. MIXED & PUMPED 25 SX CLASS "C" CEMENT FROM 53' TO SURFACE. DID NOT CIRC. TO SURFACE HEAD. HOOKED UP TO SURFACE HEAD. BEGAN TO PUMP CEMENT. HOLE DEVELOPED IN SURFACE CASING BELOW SURFACE WELLHEAD. DUG OUT CELLAR. ND BOP CUT OFF WELLHEAD. CLEANED OUT STEEL PIT W/PUMP. RD PUMP & EQUIPMENT.

5/8/2013 - RDPU & EQUIPMENT. DROVE TO NEXT LOCTATION. INSTALLED GROUND LEVEL MARKER. COVERED CELLAR, CUT OFF DEADMEN & CLEANED LOCATION.

Current Wellbore Schematic as of 5/2/2013 Well Name: JL KEEL 9 27 Date Prepared: 6/25/2013 Brandi Williams 1980 FSL 1980 FE J-08-175-31E 1950 32.84729 -103.88898 Last Updated: Spud Date RR Date 5-Oct-64 APIS 30-015-10372 22-0¢-64 Spud Dale to RR Date: GROUND 3781 Completion Stan Date KB. Completion End Date Depths (KB) Completion Total Days: 3737 TD Co-codinates Surface Casing 8-5/8", 24#, J-55 set at 570 Hole Size 5vrf Cto 8-5/6" @ 570" C/nt w/ 370 ax Incor 2% gel - 2% Ca Cl TCC @ surf TOC & Sur! Production Casing: 5-1/2\*, 14817# J-55 set at 3725 Cml w/ 325 ax TOC @ 1200\* - CBL Perfd Q53 7-7/8" Pmp'd 25 sx from 53' to surf Perfd @ 620 & Spot 585 ax cmt. Tagged plug @ 387 0 Tubing: 70F - Tool @ 889. Length (ft) 2-7/6", 6-5#, J-55, 8vd 1-5N 3637 TOF - tbg @ 1126 3630 Roc @ 1128 TOC @ 1200 Rods & Pump: Scale around the cmt volume 1 palish rod 25 calculated to cove 2 pony roda (78-D) 10 1600 51-7/8 rods (78-D) 1275 81:3/4 rods (78-D) 2025 12 7/8 rods (78-0) 0 300 1 pany rod (78-D) Notes: 1/25/11. Unsuccessful worksyer. The and rods stuck in hole and full of scale. PAA Notes: Pumped 585 ax @874" Tagged plug \$3826. Dumped 50 gals of pee gravel and lagged \$397. Sgrid 40sx and displaced to 520 llagged @633° Sgrid 50 sx tagged @367° Perfd @53°, Pmpid 25 sx from 53° to surf. Cull off wellhead, firstnic ground level of Perforations: 2952, 54, 62, 64 0 0 2952-2991 2983, 89, 91, 3009, 10 3027, 29 0 o 3000-3070 3048, 51,53, 50,60, 3064-70 3106-10 3212 14.20,22,24,34 O 0 3106-10 3243,45,47,52,54 0 0 3212-3256 3276,78, 3286-99,3308,10,12 3247.58 Co o 3374-3382 3374,76,78,80,82 3405.12,20,26 3504,05,06.07,0 o 3406-3426 3542-46, 3551-57 o 3504-3599 3594-98 3614-19, 3624-28, 3639-55, 3668-74, 3680-88 p 3014-3688 3712-16: 3722-24 Production Cas 5-1/2" @ 3725 9 3712-3724 TOC @ 1190" PBTD @ 3737

TO @ 3737