

STATE OF OHIO
DEPARTMENT OF NATURAL
RESOURCES

DIVISION OF MINERAL
RESOURCES MANAGEMENT
WELL PERMIT

API WELL NUMBER

34-099-2-3157-00-00

OWNER NAME, ADDRESS

D & L ENERGY INC (Owner #: 2651)
2761 SALT SPRINGS RD
YOUNGSTOWN OH 44509

DATE ISSUED

6/28/2011

PERMIT EXPIRES

6/27/2012

TELEPHONE NUMBER

(330) 792-9524

IS HEREBY GRANTED PERMISSION TO: Salt Water Injection Well New Well

AND ABANDON WELL IF UNPRODUCTIVE

PURPOSE OF WELL: Water Injection - Disposal

COMPLETION DATE IF PERMIT TO PLUG:

DESIGNATION AND LOCATION:

LEASE NAME NORTHSTAR KHALIL (SWIW #11)
WELL NUMBER 3
COUNTY MAHONING
CIVIL TOWNSHIP COITSVILLE
TRACT OR ALLOTMENT
SURFACE FOOTAGE LOCATION 10,769' SL & 1012' WL OF COITSVILLE TWP.
TARGET FOOTAGE LOCATION

SURFACE NAD27

X: 2520217

Y: 524113

LAT: 41.0898330797883

LONG: 80.6126089473609

TARGET NAD27

TYPE OF TOOLS: Air Rotary/Fluid Rotary

PROPOSED TOTAL DEPTH 9300 FEET

GROUND LEVEL ELEVATION 1036 FEET

GEOLOGICAL FORMATION(S):

KNOX-PRECAMBRIAN

SPECIAL PERMIT CONDITIONS Salt Water Injection Well (Class II) Construction and Operating Conditions

CONDITIONALLY APPROVED CASING PROGRAM (SUBJECT TO APPROVAL OF THE OIL AND GAS WELL INSPECTOR):

9-3/4 " APPROX. 1010 ' WITH CEMENT CIRCULATED TO SURFACE
7" CASING 8215' CEMENTED TO A MINIMUM OF 300' ABOVE INJECTION ZONE
4-1/2" TUBING SET ON A PACKER APPROX. 15' ABOVE INJECTION ZONE

This permit is NOT TRANSFERABLE. This permit, or an exact copy thereof, must be displayed in a conspicuous and easily accessible place at the well site before permitted activity commences and remain until the well is completed. Ample notification to inspector is necessary.

OIL AND GAS WELL INSPECTOR:

ROBERTS CARL (330) 451-9921
RICK SIMMERS - Supervisor (330) 284-8535
DISTRICT #: (330) 896-0616

FIRE AND EMERGENCY NUMBERS:

FIRE: () - 911

MEDICAL SERVICE: () - 911

INSPECTOR NOTIFICATION

The oil and gas inspector must be notified at least 24 hours prior to:

1. Commencement of site construction
2. Pit excavation and closure
3. Commencement of drilling, reopening, converting or plugback operations
4. Installation and cementing of all casing strings
5. BOP testing
6. Well stimulation

The oil and gas inspector must be notified immediately upon:

1. Discovery of defective well construction
2. Detection of any natural gas or H2S gas during drilling in urban areas
3. Discovery of defective well construction during well stimulation
4. Determination that a well is a lost hole
5. Determination that a well is a dry hole

John F. Husted

CHIEF, DIVISION OF MINERAL RESOURCES
MANAGEMENT

STATE OF OHIO

DEPARTMENT OF NATURAL
RESOURCES

**DIVISION OF MINERAL
RESOURCES MANAGEMENT
WELL PERMIT**

API WELL NUMBER

34-099-2-3157-00-00

D & L ENERGY INC
2761 SALT SPRINGS RD
YOUNGSTOWN, OH 44509

DAILY ROUTE SLIP *Coitsoille*

APPLICATION NO. aPATT019741TYPE: Salt Water Injection WellCONAME D & L ENERGY INC

API

WELL NAME /NO. NORTHSTAR KHALIL

3

COUNTY 99 MAHONINGINITIALSDATE

DATE APPLICATION REC'D

pn5/24/2011

PERMIT FEE AND CHECK NO.

\$1,000.0021167

RUSH AMOUNT RUSH CHECK NO.

\$0.000

APPLICATION ENTERED

pn5/24/2011APPLICATIONS AND PLATS SENT
FOR MINE APPROVAL--

COAL APPROVAL RECEIVED

pn6/2/11

OIL/GAS AFFIDAVIT REC'D

pn6/2/11

URBANIZED AREA NOTIFICATION SENT

pn6/2/11URBANIZED AREA NOTIFICATION
SENT TO INSPECTOR/REC'D BACKpn6/14/11

URBAN MAP REVIEW

pn6/14/11SAMPLES: YES /SPECIAL AREASpn6/28/11

GEOLOGIST APPROVAL

pn6/28/11

DATA ENTRY /ISSUED

pn6/28/11PERMIT: TAKEN MAILED pn6/28/11FAX TO:

FINAL MAP CHECK

JE7/18/2011

COMMENTS:

Proof Sheet

APPL NUMBER	aPATT019741
OWNER NUMBER	2651
OWNER NAME	D & L ENERGY INC
EXISTING WELL	0
API PERMIT NO	
APPL TYPE	SWIW
TYPE OF WELL	SWD
VARIANCE REQUEST	
WELL NAME	NORTHSTAR KHALIL (Swiw*1)
WELL NUMBER	3
PREV/PROPOSED TD	9300
DRILL UNIT ACRES	6.7
TYPE OF TOOL	RTAF
WELL CLASS	
FIRE PHONE	() - 911
MEDICAL PHONE	() - 911
COUNTY CODE	99
COUNTY NAME	MAHONING
COAL (Y=-1/N=0)	-1
CIVIL TOWNSHIP	COITSVILLE
SURF QUAD	CAMPBELL
Nad 27 SURF ORIG X	2520217
Nad 27 SURF ORIG Y	524113
GROUND ELEVATION	1036
SURF SEC	
SURF LOT	
SURF QTR TWP	
SURF ALLOT	
SURF TRACT	
SURF FRACTION	

URBANIZED AREA ? ☒

NAME CAMPBELL CITY

DISPOSAL PLAN 1	ND
DISPOSAL PLAN 2	
DISPOSAL PLAN 3	
DISPOSAL PLAN 4	
DISPOSAL PLAN 5	
MP Check #	0

PROPOSED FORMATIONS

KNOX-PRECAMBRIAN

TARG CIVIL TWP	
TARG QUAD	
Nad 27 TARG ORIG X	
Nad 27 TARG ORIG Y	
TARG ELEV	0
TARG SECTION	
TARG LOT	
TARG QTR TWP	
TARG ALLOT	
TARG TRACT	
TARG FRACTION	

Proof Sheet

SURFACE FOOTAGE

10,769' SL & 1012' WL of Coatsville Twp.

TARGET FOOTAGE

CASING PROGRAM

09	9 3/4	1010
32	7	8215
40	4 1/2	15

SPECIAL CONDITIONS/COMMENTS

Class II Drilling and Completion Conditions

COMPLETION DT

--

MINES APPROVAL

5/24/2011

AFFIDAVIT APPROV

--

FINAL ENTRY DATE

6/28/2011



Ohio Department of Natural Resources

JOHN R. KASICH, GOVERNOR

DAVID MUSTINE, DIRECTOR

Division of Mineral Resource Management

John F. Husted, Chief

2045 Morse Road—Bldg H-2

Columbus, OH 43229-6693

Phone: (614) 265-6893, Fax: (614) 265-7999

June 28, 2011

D & L Energy, Inc.
2761 Salt Springs Road
Youngstown, Ohio 44509

**RE: Permit #3157, SWIW #11, Northstar Khalil No. 3, Coitsville
Township, Mahoning County, Ohio**

Dear Sir/Madam:

The enclosed saltwater injection well permit is issued subject to the following construction and operational conditions.

Constructional conditions:

1. The 7" casing must be enclosed in cement from the total depth to approximately **7915 feet** (minimum of 300 feet above the top of the injection zone).
2. Injection tubing must be set on a packer at approximately **8200 feet**. A 1/4", female, threaded fitting with a stop valve must be installed on the tubing and accessible at the surface.
3. **The annular space between the injection tubing and the 7" production casing must be filled with a fluid (e.g., freshwater with a corrosion inhibitor additive), pressure tested to at least 1890 psi, and monitored for at least 15 minutes with no more than a five percent decline in pressure. Additionally, the injection line must also be tested to 1890 psi for 15 minutes with no more than a five percent decline.**
4. The UIC Section and the Mineral Resources Inspector must be notified at a minimum of 48 hours in advance of the time of cementing, placing and removing of casing, installation of the tubing and packer, testing of the casing, construction of the surface facilities, pressure testing of the injection line, and initial injection so that a representative of the Division can be present to witness the operations. The Division must also be notified in advance of any subsequent removal of the injection tubing or resetting the packer. A pressure test will also be required.
5. Surface facilities as proposed in the application are satisfactory and must be constructed under the supervision of a representative of the Division. A concrete pad with drain must be constructed so as to contain any spillage of saltwater

during unloading from the trucks. Any proposed changes in the surface facilities must be submitted in writing and must have prior approval of the UIC Section.

6. **The underground concrete vault associated with the catch basin on the unloading pad shall be of one-piece construction and if the concrete vault has a detached lid, the lid must be exposed above the ground level. Additionally, the inside walls of the concrete vault shall be sealed with a salt-corrosion type material such as an asphalt-based coating to prevent deterioration of the vault from the brine water.**
7. A Well Construction Record (Form 8) must be submitted within 30 days after completion describing how the well was completed for injection operations. This report should include the amount and grade of tubing, type and depth of packer, treatment of the injection formation, testing of the system integrity, method used to monitor pressure in the annulus and injection tubing, and method used to monitor volumes of injected fluid.

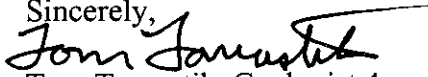
Operational Conditions:

1. Surface injection pressure must not exceed **1890** psi.
2. No liquids or waste matter from any source other than saltwater from oil and gas operations or standard well treatment fluid may be injected into this well. All fluids must be stored in approved tanks and allowed to settle before injection.
3. The annulus between the injection tubing and the 7" production casing must be monitored either continuously during injection of fluids or at least monthly at a minimum pressure of 200 psi. If such monitoring indicates a leak in the casing, tubing, or packer, the UIC Section must be immediately notified at (614) 265-1032.
4. Injection pressures and volumes must be monitored on a daily operational basis with average and maximum injection pressures and volumes compiled and recorded on a monthly basis and filed annually with the Division.
5. **As of July 1, 2010, an injection disposal fee is required to be submitted to the Division each quarter. The form and guidelines are attached for your convenience.**
6. Results of the monitoring required in paragraphs three and four above must be filed with the Division annually on Form 204. This report is due no later than 45 days after the last day of each calendar year.
7. Upon discontinuance of injection operations, the owner/operator must apply for a permit to plug and abandon the well. The well must be plugged and abandoned within 60 days after discontinuance of operations.
8. Any proposed changes in the procedures or plans outlined here or in the saltwater injection well application must be submitted in writing to the UIC Section. If such changes are approved, they will be authorized in writing.

If there are any questions concerning this well or the above conditions, please feel free to contact me at (614) 265-1032.

For the Chief of the Division of Mineral Resources Management

Sincerely,

A handwritten signature in black ink, appearing to read "Tom Tomastik", with a long horizontal flourish extending to the right.

Tom Tomastik, Geologist 4

Division of Mineral Resources Management

2045 Morse Road, H-3

Columbus, Ohio 43229-6693

Cc: Carl Roberts, Mineral Resources Inspector

Permitting File

UIC File

STATE OF OHIO
DEPARTMENT OF NATURAL RESOURCES

Under the authority of, and in accordance with Section 1509.10 of the Ohio Revised Code, the Division of Geological Survey hereby requests a set of drill cuttings and/or core (s) from the following well:


Operator D & L Energy, Inc. Phone No. (330) 792-9254
Lease Name/Well # Northstar Khali # 3 Permit No. 2-3157
(SWIW #11)
Located in 10,769'SL & 1012'WL of Coitsville Twp.
Of Coitsville Township Mahoning County.

Drill cuttings are to be collected every 10 feet, or as specified otherwise, from the following intervals:

Every 10 feet from Trenton Limestone to Precambrian

These cuttings are to be made available to the Survey and can be delivered in person or shipped to the Ohio Division of Geological Survey, 2045 Morse Road, Building C-1, Columbus, Ohio 43229-6693 or the Ohio Division of Geological Survey, 3307 South Old State Road, Delaware, Ohio 43015-9454. If you cannot deliver the cuttings, please notify Greg Schumacher at (740) 548-7348, Extension 125, Monday through Friday 8:00 AM-5:00 PM, as soon as possible after the drilling has been completed, so that arrangements can then be made to pick up the cuttings at the well site.

Delivery of the cuttings or notification of availability is the responsibility of the operator of the well.



Larry Wickstrom, Chief
ODNR-The Division of Geological Survey

06/28/2011

Date

SUPPLEMENT TO APPLICATION
PERMIT FOR A SALTWATER INJECTION WELL (Form 210)

Ohio Department of Natural Resources, Division of Mineral Resources Management
2045 Morse Road, Bldg H3
Columbus, OH 43229-6693

AREA OF REVIEW. An application for a saltwater injection well (SWIW) will be evaluated on the basis of an "area of review" surrounding the proposed well. The area of review for wells in which injection of greater than two hundred barrels per day is proposed shall be the area circumscribed by a circle with the center point at the location of the injection well and a radius of one-half mile. The area of review for wells in which a maximum injection of two hundred barrels per day or less is proposed shall be the area circumscribed by a circle with the center point at the location of the injection well and a radius of one-quarter mile.

31. PROPOSED INJECTION ZONE

Geological Formation: Knox-Precambrian
Injection Interval: From: 8215 feet to 9180
Geologic description of injection zone: Interbedded, sandstone, limestone, dolomite, arkose sands

32. WELL CONSTRUCTION AND OPERATION

- A. Description of the proposed casing and cement program for new wells, or of the casing, cementing or sealing with prepared clay for existing wells to be converted:
Set 100' of 11-3/4" conductor, drill to 1010' and set 1010' of 9-3/4" casing with 300 sacks of superlite cement, drill 8-3/4" hole from 1010' to 9184' and set 8215' of 7" casing, set casing annulus packer (cap) at 8215', cement 7" casing from 8215' with 165 sacks SFL cement.
- B. Proposed method for testing the casing:
Mechanical Integrity test, then daily monitoring with a chart recorder.
Pressure test annulus to 1890 psi for 15 minutes with no more than a 5% decline
- C. Description of the proposed method for completion and operation of the injection well:
Acidize and injection test thru 7" casing. Install 4" lined tubing with Baker packer set. *Set at 8200' and pressure test to 1890 psi w/ no more than 5% decline*
- D. Description of the proposed unloading, surface storage, and spill containment facilities:
Concrete unloading pad
13 - 400 BBL steel holding and settling tanks contained in a 60'x90' concrete containment area with 2'-6" concrete walls.
*60 X 90 X 0.0148 = 79.9 bbls./inch
X 30" = 2397 barrels of capacity
6/28/11 - Per Gary at DEL Energy, Inc. - only 2000 barrels will be tied together at the bottom.
TSS*
- RECEIVED
MAY 24 2011
By _____

33. PROPOSED INJECTION VOLUMES

- A. Indicate the estimated amount of saltwater to be injected into the proposed injection well per day:
AVERAGE: 1500 BBL MAXIMUM: 2000 BBL
- B. Indicate the method to be used to measure the actual amount of saltwater injected into the well:
Daily water tickets and BBL counter.

34. PROPOSED INJECTION PRESSURES

- A. Indicate the estimated pressure to be used for injection of saltwater into the proposed injection well:
AVERAGE: 1200 MAXIMUM: 1890
- B. Indicate the method to be used to measure the actual daily injection pressure:
Chart recorder

35. PROPOSED CORRECTIVE ACTION

Explain any corrective action proposed for wells penetrating the proposed injection formation or zone within the area of review:
n/a

36. **MAP.** Each application for a permit shall be accompanied by a map or maps showing and containing the following information:

- A. The subject tract of land on which the proposed injection well is to be located.
- B. The location of the proposed injection well on the subject tract established by an Ohio registered surveyor showing the distances in feet from the proposed well site to the boundary lines on the subject tract;
- C. The geographic location of all wells, penetrating the formation proposed for injection regardless of status, within the area of review;
- D. All holders of the land owner's royalty interest of record, or holders of the severed oil and gas mineral estates of record in the subject tract;
- E. All owners or operators of wells producing from or injecting into the same formation proposed as the injection formation.

37. **SCHEMATIC DRAWING OF SUBSURFACE CONSTRUCTION.** Label the schematic drawing below indicating size and setting depth of surface casing, intermediate (if any) and production casings; amount of cement used, measured or calculated tops of cement; size and setting depth of tubing; type and setting depth of packer; geologic name of injection zone showing top and bottom of injection interval. If the proposed input well design is substantially different from the schematic below, attach on a separate sheet a schematic of your proposal labeled with the above information.

SCHEMATIC OF SUBSURFACE CONSTRUCTION

The schematic diagram illustrates the subsurface construction of a well. It features several horizontal lines representing different components and their depths:

- 9-3/4" SURFACE CASING @ 1010'**: Indicated by a vertical label on the left.
- 7" PRODUCTION CASING @ 8215'**: Indicated by a vertical label on the left.
- 4" TUBING @ 8200'**: Indicated by a vertical label on the right, with a handwritten note "8200' 2 1/2" and a circled "8200'".
- PACKER**: Indicated by a vertical label on the right, with a circled "8200'".
- TD 9184' 9300'**: Indicated by a vertical label on the right, with a handwritten note "9300' 2 1/2".

A "RECEIVED" stamp is present, dated MAY 24 2011, with a "By" line. The diagram also shows two packer symbols (X in a square) and two cement symbols (circles with X) at specific depths.

38. Public notice of an application for an enhanced recovery project is required by law. In addition, the applicant must submit, on an attached sheet, a list of the names and address of those persons required to receive personal notice in accordance with Rule 1501:9-5-05(E)(1), of the Ohio Administrative Code.

After submitting the application, and after a determination by the Division that it is complete as required by the rules of the Division, a legal notice must be published by the applicant in a newspaper of general circulation in the area of review. The legal notice must contain the information described in Rule 1501:9-5-05(E)(1) of the Ohio Administrative Code. A copy of the notice must be delivered to all owners or operators of wells within the area of review producing from or injecting into the same formation proposed as the injection formation. Proof of publication, publication date, and an oath as to the delivery to those entitled to receive personal notice under this method must be filed with the Division within thirty days after the Division determines that the application is complete.

In addition, notice of all applications for enhanced recovery projects will be published in the Division's Weekly Circular.

The undersigned hereby agrees to comply with all provisions for an enhanced recovery project as required by Chapter 1501:9-5 of the Ohio Administrative Code. In addition, the undersigned deposed and says that he shall conform to all provisions of Section 1509.072 of the Ohio Revised Code, and to all orders and rules issued by the Chief, Division of Mineral Resources Management.

Owner/Authorized Agent (Type or Print): Nicholas C. Paparodis
Signature of Owner/Authorized Agent: [Signature] Title: V.P. LAND OPERATIONS
Permanent Address of Home Office: 2761 Salt Springs Road, Youngstown, OH 44509

If signed by Authorized Agent, a certified copy of appointment of agent must be on file with the Division.

SWORN to and subscribed before me this 18 day of May, 2011.
[Signature]
(SEAL) Notary Public



KIMBERLY A. LITTLE
MY COMMISSION EXPIRES
JUNE 1, 2014

Permit #357



Ohio Department of Natural Resources
Division of Mineral Resources Management
2045 Morse Rd. Bldg. H-3 - Columbus OH 43229-6693



Urbanized Area Permit Conditions

Application Number	Northstar Khalil #3	Permit Number	SWIW #11	Inspection Date	6/14/11	Modification Date (if applicable)	
Company	D & L Energy INC	Lease Name/Well #	North Star Lucky #4				<i>Khalil #3</i>
County	Mahoning	Township	Coitsville				
Section/Lot		Urban Area	City of Campbell				<i>DOB</i>
Inspected By	Carl Roberts						
Accompanied By	Nick Paparodis, VP of Land Operations						

Directions to Location Rte 422 east. Old McCartney road south approx. 60 feet. Access is on the east side.

ITEM	LEASE ROAD, WELL SITE CONSTRUCTION	Comments:
1	Tree/Brush Removal/Disposition	The trees will be chipped, buried and stock piled.
2	Topsoil Removal/Stockpiles/Placement	The topsoil will be placed to the south side.
3	Erosion/Sediment Control (Silt Fence, Berms)	A silt fence will be placed on the south, east and west sides of the location.
4	Drainage Controls (Diversion Ditches, Culverts, Waterways, Crossings)	There are no waterways or crossings. A silt fence will be placed on the south, east and west sides of the location.
5	Signage	The ID sign will be posted on Old McCartney road.
6	Apron/Culverts/Road Material	Rocks will be used.
7	Pull Off Area	The pull off area will be at the drilling site.
8	Parking	The parking will be at the drilling site.
9	GPS - Access Road	41.09104 80.61269
10	GPS - Well Stake	41.08997 80.61236
11	GPS - Tank Battery	41.09015 80.61221

ITEM	DRILLING CONSIDERATIONS	Comments:		
	Noise Mitigation			
12	(Mufflers, Extra Frac Tanks, Tarps)	Hospital mufflers will be used on the drilling rig.		
13	Rig Type			
14	Is a Blow-out Preventor required?	X	Yes	No
	If No, explain:	The rig will be an air, fluid rotary rig.		
	Equipment Placement/ Orientation (Rig/ Frac Tanks/ etc.)			
15		It is recommended that the drilling rig be placed north to south.		
16	Drilling Pits (Placement/Orientation)	It is recommended that the drilling pits be placed on the east side of the drilling rig, north to south.		
17	Fencing (Pits/Entire Location)	The drilling pits will be fenced in.		
18	Flood Plain	There is no known flood plain in the area.		
19	Mine Voids	There are no known mines in the area.		
20	Verify Water Wells Within 300'	The area is on city water.		
21	Verify Structures Within 500'	There are 6 structures within 500 feet		
22	Verify Streams and Drainage	There are no streams. Drainage to the south side, east side and west side.		

ITEM	RESTORATION	Comments:		
23	Pit Closure - (Standard/ Solidification/ Off-Site Disposal - state time frame)	The drilling pits will be solidified and closed within 14 days after the drilling is complete		
24	Site Specific Time Frame For Restoration	The entire location will be put back within 3 months after the date upon which the surface drilling of the well is commenced		
25	Erosion/Sediment Control	A silt fence will be placed on the south, east and west sides of the location		
26	Drainage Control	A silt fence will be placed on the south, east and west sides of the location		

ITEM	PRODUCTION	Comments:		
27	Is the Access Road Gate required?	X	Yes	No
	If No, explain:			
28	Landscaping/Screening (Wellhead, Tank Battery) (Waiver Attached if applicable)	A chain link fence with 3 strands of barbed wire on top will be place around the wellhead and the tank battery		
29	Fencing (Wellhead, Tank Battery) (Waiver Attached if applicable)	A chain link fence with 3 strands of barbed wire on top will be place around the wellhead and the tank battery		

WAIVERS	Comments:		
Is the Company required to submit a waiver?	Yes	X	No
If yes, submit the following waiver requests:			

Is the Company required to submit revised drawings? Yes X No

THE FOLLOWING ITEMS HAVE BEEN CHANGED FROM THE ORIGINAL APPLICATION:

APPLICATION FOR A PERMIT (Form 1)
OHIO DEPARTMENT OF NATURAL RESOURCES
DIVISION OF MINERAL RESOURCES MANAGEMENT
2045 Morse Road, Building H-3
COLUMBUS, OHIO 43229-6693
(614) 265-6633

SEE INSTRUCTIONS ON PAGE 2 (BACK)

1. I, We (applicant) <u>D&L ENERGY, INC.</u> (address) <u>2761 SALT SPRINGS RD., YOUNGSTOWN, OH 44509</u> hereby apply this date <u>MAY 18</u> , 20 <u>11</u> for a permit to:		2. Owner #: <u>2651</u> Phone #: <u>330-792-9524</u>
<div style="display: flex; justify-content: space-between;"><div><input type="checkbox"/> Reissue (check appropriate blank)</div><div><input type="checkbox"/> Revised Location</div><div><input type="checkbox"/> Convert</div></div> <div style="display: flex; justify-content: space-between;"><div><input checked="" type="checkbox"/> Drill New Well</div><div><input type="checkbox"/> Plug Back</div><div><input type="checkbox"/> Deepen</div></div> <div style="display: flex; justify-content: space-between;"><div><input type="checkbox"/> Drill Directionally</div><div><input type="checkbox"/> Plug and Abandon</div><div><input type="checkbox"/> Reopen</div></div> <div style="display: flex; justify-content: space-between;"><div><input type="checkbox"/> Drill Horizontally</div><div><input type="checkbox"/> Orphan Well Program</div><div><input type="checkbox"/> Temporary Inactive</div></div>		
3. TYPE OF WELL: <div style="display: flex; justify-content: space-between;"><div><input type="checkbox"/> Oil & Gas</div><div><input type="checkbox"/> Annular Disposal</div><div><input checked="" type="checkbox"/> Saltwater Injection</div></div> <div style="display: flex; justify-content: space-between;"><div><input type="checkbox"/> Stratigraphic Test</div><div><input type="checkbox"/> Gas Storage</div><div><input type="checkbox"/> Other (explain): _____</div></div> <div style="display: flex; justify-content: space-between;"><div><input type="checkbox"/> Solution Mining*</div><div><input type="checkbox"/> Enhanced Recovery* (* if checked, select appropriate box below)</div><div></div></div> <div style="display: flex; justify-content: space-between;"><div><input type="checkbox"/> Input/Injection</div><div><input type="checkbox"/> Water Supply</div><div><input type="checkbox"/> Observation</div></div> <div style="display: flex; justify-content: space-between;"><div></div><div><input type="checkbox"/> Production/Extraction</div><div></div></div>		
4. MAIL PERMIT TO: D&L ENERGY, INC. 2761 SALT SPRINGS RD. YOUNGSTOWN, OH 44509		20. TYPE OF TOOLS: <div style="display: flex; justify-content: space-between;"><div><input type="checkbox"/> Cable</div><div><input type="checkbox"/> Air Rotary</div></div> <div style="display: flex; justify-content: space-between;"><div><input type="checkbox"/> Cable / Air Rotary</div><div><input checked="" type="checkbox"/> Air / Fluid Rotary</div></div> <div style="display: flex; justify-content: space-between;"><div><input type="checkbox"/> Cable / Fluid Rotary</div><div><input type="checkbox"/> Fluid Rotary</div></div> <div style="display: flex; justify-content: space-between;"><div><input type="checkbox"/> Cable / Air / Fluid Rotary</div><div><input type="checkbox"/> Service Rig</div></div>
5. COUNTY: <u>MAHONING</u> 6. CIVIL TOWNSHIP: <u>CITY OF CAMPBELL</u> 7. SECTION: _____ 8. LOT: _____ 9. FRACTION: _____ 10. QTR TWP: _____ 11. TRACT / ALLOT: _____ 12. WELL #: <u>3</u> 13. LEASE NAME: <u>NORTHSTAR KHALIL</u> 14. PROPOSED TOTAL DEPTH: <u>9300</u> 15. PROPOSED GEOLOGICAL FORMATION: <u>KNOX-PRECAMBRIAN</u> 16. DRILLING UNIT IN ACRES (must be same as acres indicated on plat): <u>6.7</u>		21. PROPOSED CASING PROGRAM: <u>11-3/4" FOR 100 FT , 9-3/4" FOR 400 FT CEMENTED TO SURFACE, 7" CEMENTED TO SURFACE</u>
17. IF PERMITTED PREVIOUSLY: API #: _____ OWNER: _____ WELL #: _____ LEASE NAME: _____ TOTAL DEPTH: _____ GEOLOGICAL FORMATION: _____		22. FIRE AND MEDICAL DEPARTMENT TELEPHONE NUMBERS: (closest to well site) Fire: <u>911</u> Medical: <u>911</u>
18. IF SURFACE RIGHTS ARE OWNED BY THE OHIO DEPARTMENT OF NATURAL RESOURCES Division Name: <u>N/A</u> Division Phone: _____		23. MEANS OF INGRESS & EGRESS: Township Road: _____ County Road: _____ Municipal Road: _____ State Highway: <u>STATE ROUTE 422</u>
19. LANDOWNER ROYALTY INTEREST: Is There An Attached List? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Name: <u>KAMAL KHALIL</u> Address: <u>19 CREED CR., CAMPBELL, OH 44405</u> Name: _____ Address: _____ Name: _____ Address: _____		24. IS THE WELL LOCATION OR PRODUCTION FACILITIES WITHIN AN URBANIZED AREA AS DEFINED BY 1509.01(Y) ? <input checked="" type="checkbox"/> Yes <div style="border: 2px solid black; padding: 5px; text-align: center; margin-top: 10px;">RECEIVED MAY 24 2011 By _____</div>

I, the undersigned, being first duly sworn, depose and state under penalties of law, that I am authorized to make this application, that this application was prepared by me or under my supervision and direction, and that the facts stated herein are true, correct, and complete, to the best of my knowledge.

I, the undersigned, further depose and state that I am the person who has the right to drill on the tract or drilling unit and to drill into and produce from a pool and to appropriate the oil or gas that I produce therefrom either for myself or others as described in this application. And furthermore, I the undersigned, being duly sworn, depose and state at this time that I am not liable for any final nonappealable order of a court for damage to streets, roads, highways, bridges, culverts, or drainage ways pursuant to Section 5577.12 of the Ohio Revised Code (ORC). I, the undersigned, further depose and state that all notices required by 1509.06 (A) (9) ORC for this application have been duly provided by me. If applying for a permit to plug and abandon a well, I hereby certify that the written notices, as required in Section 1509.13, ORC, have been given.

That I hereby agree to conform with all provisions of Chapter 1509, ORC, and Chapter 1501., OAC, and all orders and conditions issued by the Chief, Division of Mineral Resources Management.

Signature of Owner/Authorized Agent NICHOLAS PAPARODIS Title V.P. LAND OPERATIONS

If signed by Authorized Agent, a certificate of appointment of agent must be on file.

Sworn to and subscribed before me this the 18 day of may, 20 11

Kimberly A. Little
(Notary Public)



KIMBERLY A. LITTLE
MY COMMISSION EXPIRES
JUNE 1, 2014
(Date Commission Expires)

SUPPLEMENT TO APPLICATION
PERMIT FOR A SALTWATER INJECTION WELL (Form 210)

Ohio Department of Natural Resources, Division of Mineral Resources Management
2045 Morse Road, Bldg H3
Columbus, OH 43229-6693

AREA OF REVIEW. An application for a saltwater injection well (SWIW) will be evaluated on the basis of an "area of review" surrounding the proposed well. The area of review for wells in which injection of greater than two hundred barrels per day is proposed shall be the area circumscribed by a circle with the center point at the location of the injection well and a radius of one-half mile. The area of review for wells in which a maximum injection of two hundred barrels per day or less is proposed shall be the area circumscribed by a circle with the center point at the location of the injection well and a radius of one-quarter mile.

31. PROPOSED INJECTION ZONE

Geological Formation: Knox-Precambrian
Injection Interval: From: 8215 feet to 9180
Geologic description of injection zone: Interbedded, sandstone, limestone, dolomite,arkose sands

32. WELL CONSTRUCTION AND OPERATION

- A. Description of the proposed casing and cement program for new wells, or of the casing, cementing or sealing with prepared clay for existing wells to be converted:
Set 100' of 11-3/4" conductor, drill to 1010' and set 1010' of 9-3/4" casing with 300 sacks of superlite cement, drill 8-3/4" hole from 1010' to 9184' and set 8215' of 7" casing, set casing annulus packer (cap) at 8215', cement 7" casing from 8215' with 165 sacks SFL cement.
- B. Proposed method for testing the casing:
Mechanical Integrity test, then daily monitoring with a chart recorder.
- C. Description of the proposed method for completion and operation of the injection well:
Acidize and injection test thru 7" casing. Install 4" lined tubing with Baker packer set.
- D. Description of the proposed unloading, surface storage, and spill containment facilities:
Concrete unloading pad
13 - 400 BBL steel holding and settling tanks contained in a 60'x90' concrete containment area with 2'-6" concrete walls.
- RECEIVED

MAY 24 2011

By _____

33. PROPOSED INJECTION VOLUMES

- A. Indicate the estimated amount of saltwater to be injected into the proposed injection well per day:
AVERAGE: 1500 BBL MAXIMUM: 2000 BBL
- B. Indicate the method to be used to measure the actual amount of saltwater injected into the well:
Daily water tickets and BBL counter.

34. PROPOSED INJECTION PRESSURES

- A. Indicate the estimated pressure to be used for injection of saltwater into the proposed injection well:
AVERAGE: 1200 MAXIMUM: 1890
- B. Indicate the method to be used to measure the actual daily injection pressure:
Chart recorder

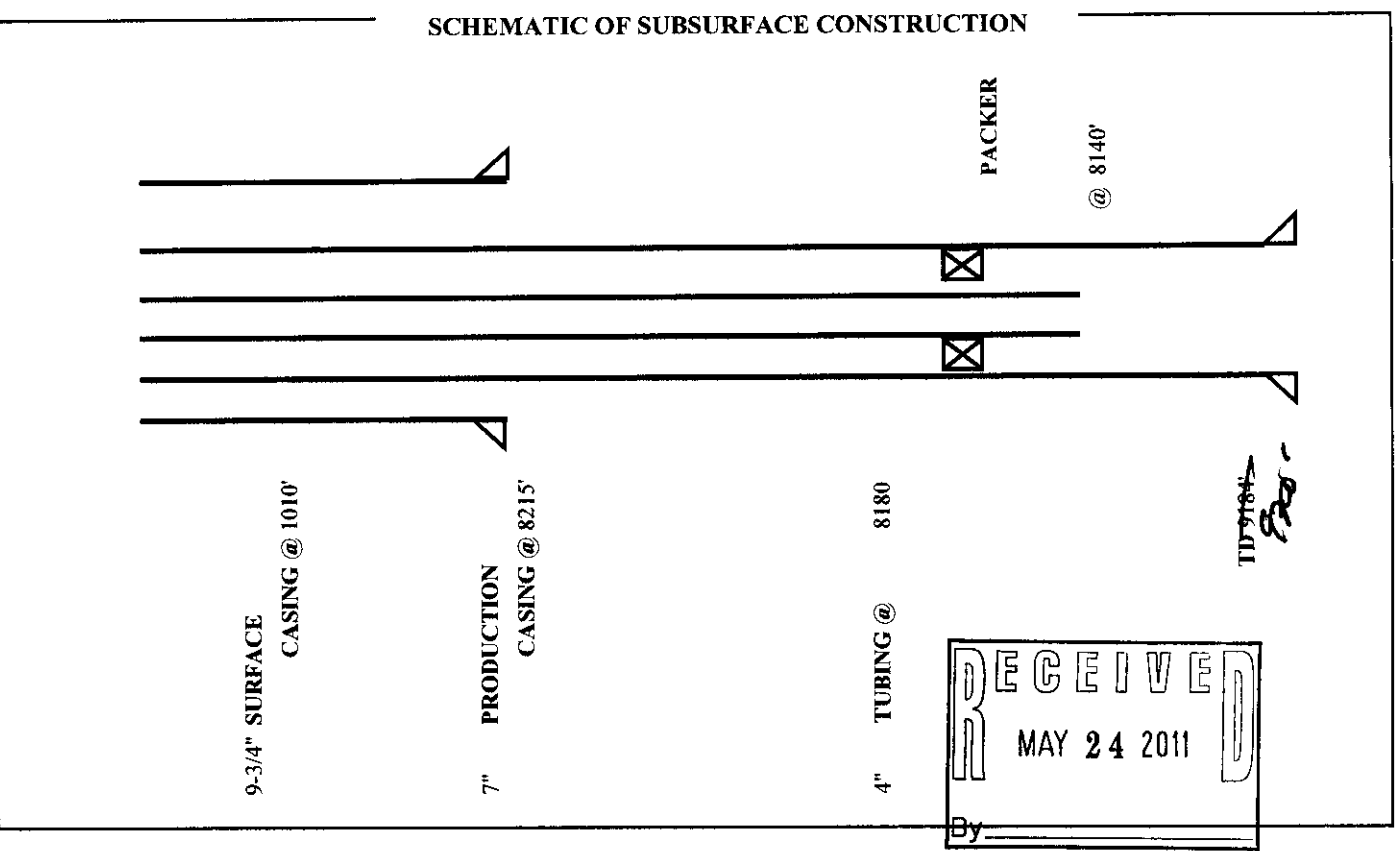
35. PROPOSED CORRECTIVE ACTION

Explain any corrective action proposed for wells penetrating the proposed injection formation or zone within the area of review:

n/a

36. **MAP.** Each application for a permit shall be accompanied by a map or maps showing and containing the following information:
- A. The subject tract of land on which the proposed injection well is to be located.
 - B. The location of the proposed injection well on the subject tract established by an Ohio registered surveyor showing the distances in feet from the proposed well site to the boundary lines on the subject tract;
 - C. The geographic location of all wells, penetrating the formation proposed for injection regardless of status, within the area of review;
 - D. All holders of the land owner's royalty interest of record, or holders of the severed oil and gas mineral estates of record in the subject tract;
 - E. All owners or operators of wells producing from or injecting into the same formation proposed as the injection formation.

37. **SCHEMATIC DRAWING OF SUBSURFACE CONSTRUCTION.** Label the schematic drawing below indicating size and setting depth of surface casing, intermediate (if any) and production casings; amount of cement used, measured or calculated tops of cement; size and setting depth of tubing; type and setting depth of packer; geologic name of injection zone showing top and bottom of injection interval. If the proposed input well design is substantially different from the schematic below, attach on a separate sheet a schematic of your proposal labeled with the above information.



38. Public notice of an application for an enhanced recovery project is required by law. In addition, the applicant must submit, on an attached sheet, a list of the names and address of those persons required to receive personal notice in accordance with Rule 1501:9-5-05(E)(1), of the Ohio Administrative Code.

After submitting the application, and after a determination by the Division that it is complete as required by the rules of the Division, a legal notice must be published by the applicant in a newspaper of general circulation in the area of review. The legal notice must contain the information described in Rule 1501:9-5-05(E)(1) of the Ohio Administrative Code. A copy of the notice must be delivered to all owners or operators of wells within the area of review producing from or injecting into the same formation proposed as the injection formation. Proof of publication, publication date, and an oath as to the delivery to those entitled to receive personal notice under this method must be filed with the Division within thirty days after the Division determines that the application is complete.

In addition, notice of all applications for enhanced recovery projects will be published in the Division's Weekly Circular.

The undersigned hereby agrees to comply with all provisions for an enhanced recovery project as required by Chapter 1501:9-5 of the Ohio Administrative Code. In addition, the undersigned deposed and says that he shall conform to all provisions of Section 1509.072 of the Ohio Revised Code, and to all orders and rules issued by the Chief, Division of Mineral Resources Management.

Owner/Authorized Agent (Type or Print): Nicholas C. Paparodis

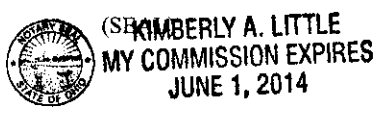
Signature of Owner/Authorized Agent: [Signature] Title: V. P. LAM OPERATIONS

Permanent Address of Home Office: 2761 Salt Springs Road, Youngstown, OH 44509

If signed by Authorized Agent, a certified copy of appointment of agent must be on file with the Division.

SWORN to and subscribed before me this 18 day of May, 20 11.

[Signature]
Notary Public
6/11/2014
Date Commission Expires



SALTWATER INJECTION WELL – AFFIDAVIT

Ohio Department of Natural Resources
Division of Mineral Resources Management
2045 Morse Road, Columbus, OH 43229-6693

State of OHIO, MAHONING County, ss

NICHOLAS C. PAPAZOIS being first duly sworn

says that as principal, or authorized agent, for D+L ENERGY, INC.,

he or she has made application for a saltwater injection well in the State of Ohio,

CITY OF
MAHONING County, CAMPBELL Township, section/lot number _____; and

further certifies that notice of application has been delivered to each individual entitled to personal notification in accordance with paragraph (E) of Rule 1501:9-3-.06 of the Ohio Administrative Code. And further affiant saith not.



Affiant Signature

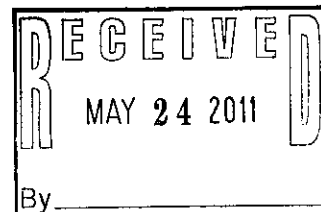
Sworn to before me and subscribed in my presence this 18 day of May,
20 11.



KIMBERLY A. LITTLE
MY COMMISSION EXPIRES
JUNE 1, 2014



Notary Public

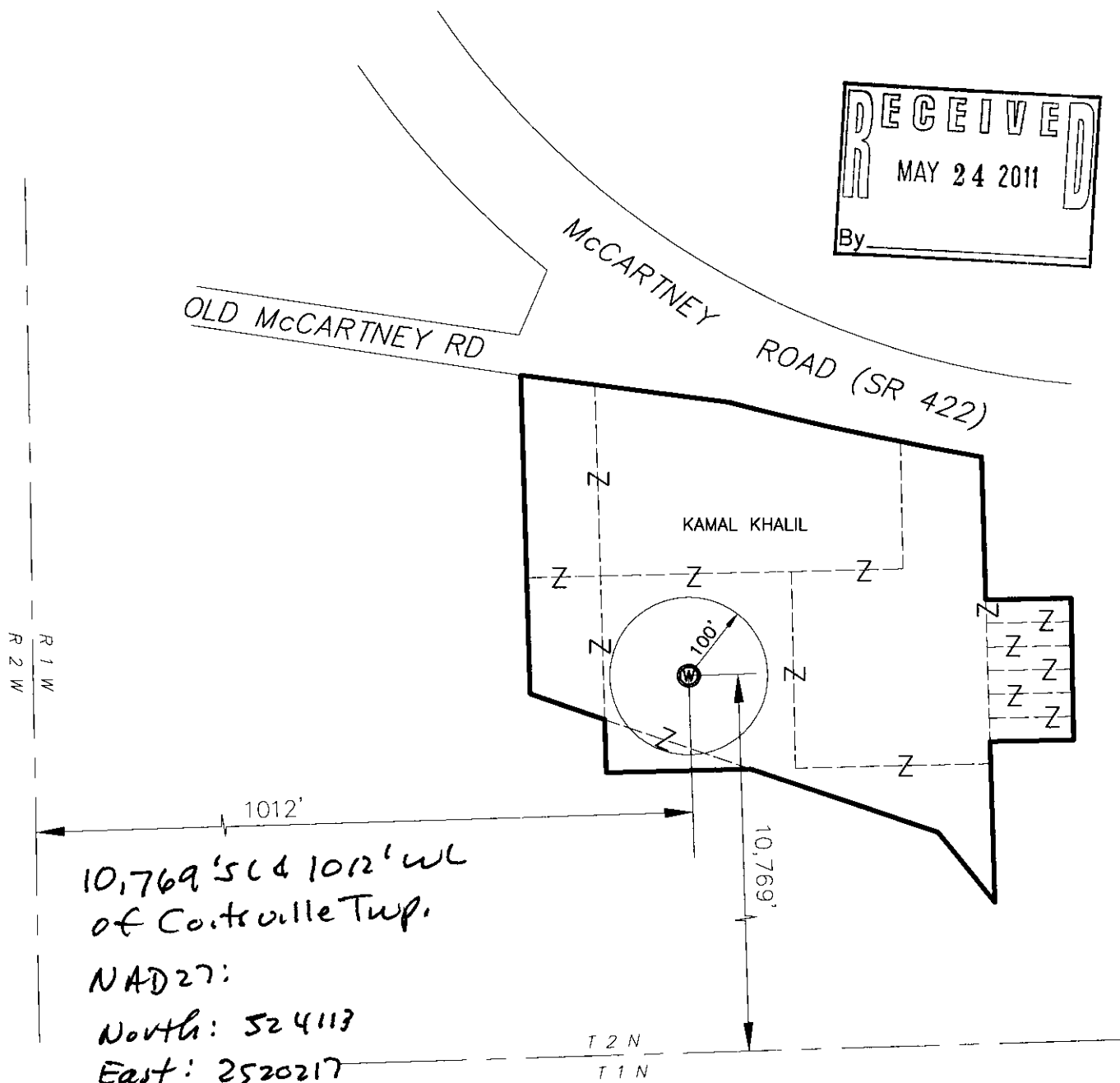
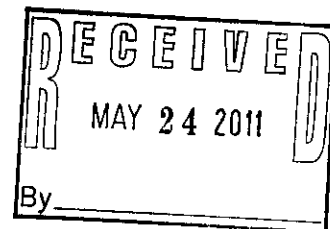


Latitude: 41° 05' 23.61"
 NORTH: 524145
 Longitude: 80° 36' 44.65"
 EAST: 2488759

WELL LOCATION PLAT

LEGEND:

- ⊙ PROPOSED BRINE WATER INJECTION WELL
NEW LOCATION



10,769' S & 1012' W
of Centreville Twp.

NAD 27:

North: 524113

East: 2520217

Surveyor or Engineer GARY TANERI		Phone # 330-207-5502	Date MAY 18, 2011	Scale 1"=200'	Acres 6.7
Lat. & Long Metadata Method GPS Accuracy 3 ft. Datum NAD83		Elevation Metadata Method USGS Accuracy 10 ft. Datum NGVD29		Survey Date 5/17/11	
Applicant / Well Operator Name D & L ENERGY, INC.		Well(Farm) Name NORTHSTAR KHALIL		Well # 3	
Address 2761 SALT SPRINGS ROAD YOUNGSTOWN, OH 44509		County MAHONING		Municipality CITY OF CAMPBELL	
Surface Landowner KAMAL KHALIL		USGS 71/2 Quadrangle Map Name CAMPBELL		Anticipated Total Depth 9300 ft.	
Surface Lessor D & L ENERGY, INC.		Angle & Course of Deviation (Drilling) VERTICAL		Surface Elevation 1036 ft.	

STATE OF OHIO
 DEPARTMENT OF NATURAL RESOURCES
 MINERAL RESOURCES MANAGEMENT
 COLUMBUS, OH 43224



Gary Richard Taneri
 Registered Professional Surveyor No. 7672



Latitude: 41° 05' 23.61"

NORTH: 524145

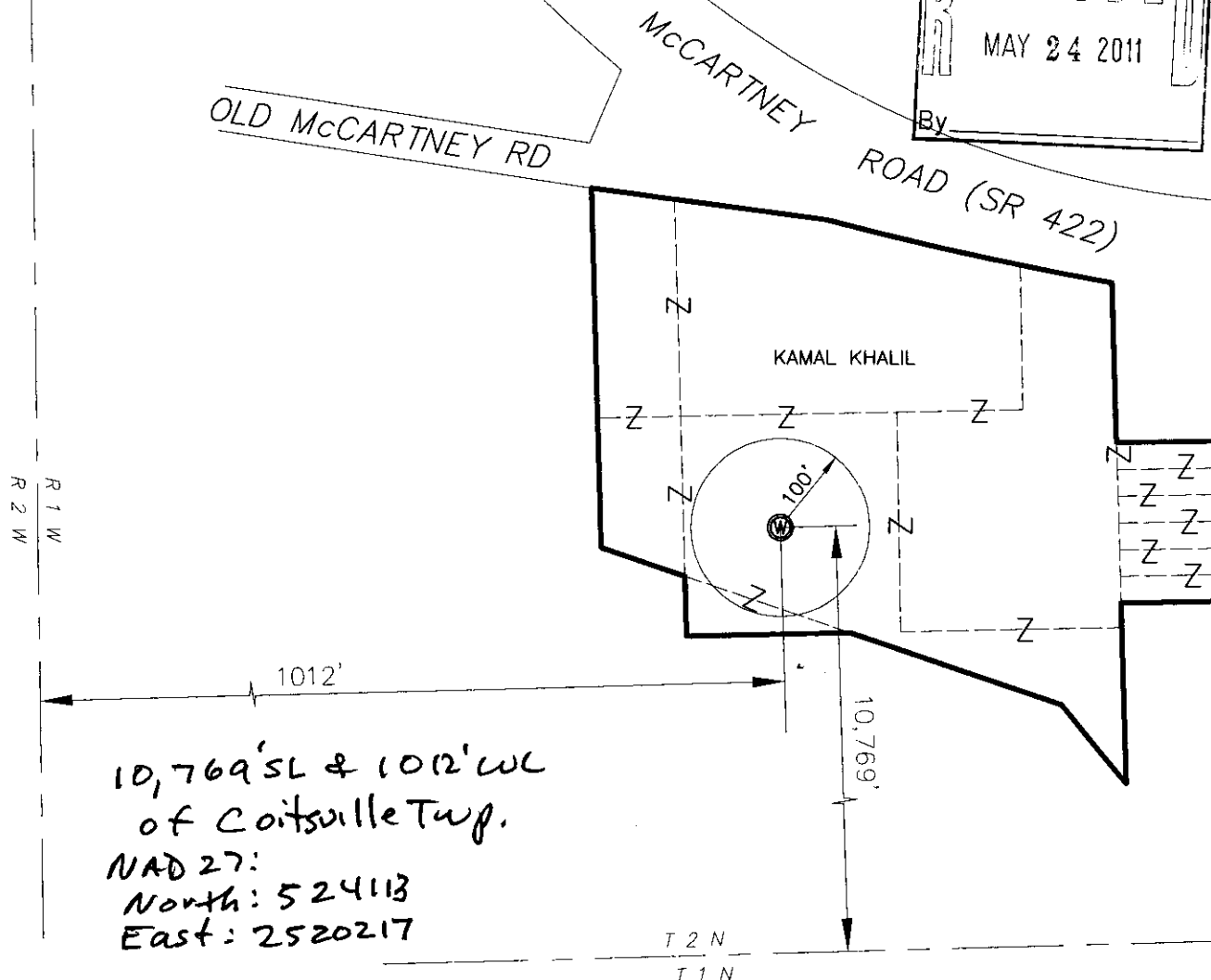
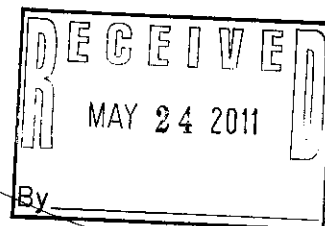
Longitude: 80° 36' 44.65"

EAST: 2488759

WELL LOCATION PLAT

LEGEND:

- ⊙ PROPOSED BRINE WATER INJECTION WELL
NEW LOCATION



Surveyor or Engineer	GARY TANERI	Phone #	330-207-5502	Date	MAY 18, 2011	Scale	1"=200'	Acreage	6.7				
Lat. & Long Metadata Method	GPS	Accuracy	3 ft.	Datum	NAD83	Elevation Metadata Method	USGS	Accuracy	10 ft.	Datum	NGVD29	Survey Date	5/17/11
Applicant / Well Operator Name	D & L ENERGY, INC.					Well(Farm) Name	NORTHSTAR KHALIL			Well #	3		
Address	2761 SALT SPRINGS ROAD YOUNGSTOWN, OH 44509					County	MAHONING			Municipality	CITY OF CAMPBELL		
Surface Landowner	KAMAL KHALIL					USGS 71/2 Quadrangle Map Name	CAMPBELL			Surface Elevation	1036 ft.		
Surface Lessor	D & L ENERGY, INC.					Angle & Course of Deviation (Drilling)	VERTICAL			Anticipated Total Depth	9300 ft.		

STATE OF OHIO
DEPARTMENT OF NATURAL RESOURCES
MINERAL RESOURCES MANAGEMENT
COLUMBUS, OH 43224



Gary Richard Taneri
Registered Professional Surveyor No. 7672



**Aerial Maps
are available for
this Permit.**

**Maps are on file
with the Division.**

STATE OF OHIO
DEPARTMENT OF NATURAL RESOURCES

Under the authority of, and in accordance with Section 1509.10 of the Ohio Revised Code, the Division of Geological Survey hereby requests a set of drill cuttings and/or core (s) from the following well:

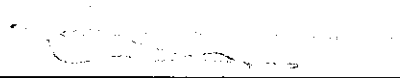
Operator D & L Energy, Inc. Phone No. (330) 792-9254
Lease Name/Well # Northstar Khali # 3 Permit No. 2-3157
(SWIW #11)
Located in 10,769'SL & 1012'WL of Coitsville Twp.
Of Coitsville Township Mahoning County.

Drill cuttings are to be collected every 10 feet, or as specified otherwise, from the following intervals:

Every 10 feet from Trenton Limestone to Precambrian

These cuttings are to be made available to the Survey and can be delivered in person or shipped to the Ohio Division of Geological Survey, 2045 Morse Road, Building C-1, Columbus, Ohio 43229-6693 or the Ohio Division of Geological Survey, 3307 South Old State Road, Delaware, Ohio 43015-9454. If you cannot deliver the cuttings, please notify Greg Schumacher at (740) 548-7348, Extension 125, Monday through Friday 8:00 AM-5:00 PM, as soon as possible after the drilling has been completed, so that arrangements can then be made to pick up the cuttings at the well site.

Delivery of the cuttings or notification of availability is the responsibility of the operator of the well.


Larry Wickstrom, Chief
ODNR-The Division of Geological Survey

06/28/2011

Date

SUPPLEMENT TO APPLICATION
PERMIT FOR A SALTWATER INJECTION WELL (Form 210)

Ohio Department of Natural Resources, Division of Mineral Resources Management
2045 Morse Road, Bldg H3
Columbus, OH 43229-6693

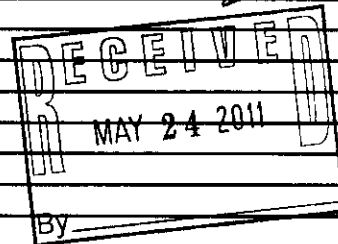
AREA OF REVIEW. An application for a saltwater injection well (SWIW) will be evaluated on the basis of an "area of review" surrounding the proposed well. The area of review for wells in which injection of greater than two hundred barrels per day is proposed shall be the area circumscribed by a circle with the center point at the location of the injection well and a radius of one-half mile. The area of review for wells in which a maximum injection of two hundred barrels per day or less is proposed shall be the area circumscribed by a circle with the center point at the location of the injection well and a radius of one-quarter mile.

31. **PROPOSED INJECTION ZONE**

Geological Formation: Knox-Precambrian
Injection Interval: From: 8215 feet to 9180
Geologic description of injection zone: Interbedded, sandstone, limestone, dolomite, arkose sands

32. **WELL CONSTRUCTION AND OPERATION**

- A. Description of the proposed casing and cement program for new wells, or of the casing, cementing or sealing with prepared clay for existing wells to be converted:
Set 100' of 11-3/4" conductor, drill to 1010' and set 1010' of 9-3/4" casing with 300 sacks of superlite cement, drill 8-3/4" hole from 1010' to 9184' and set 8215' of 7" casing, set casing annulus packer (cap) at 8215', cement 7" casing from 8215' with 165 sacks SFL cement.
- B. Proposed method for testing the casing:
Mechanical Integrity test, then daily monitoring with a chart recorder.
Pressure test annulus to 1890 psi for 15 minutes with no more than a 5% decline.
- C. Description of the proposed method for completion and operation of the injection well:
Acidize and injection test thru 7" casing. Install 4" lined tubing with Baker packer set. Set at 8200' and pressure test to 1890 psi w/ no more than 5% decline.
- D. Description of the proposed unloading, surface storage, and spill containment facilities:
Concrete unloading pad
13 - 400 BBL steel holding and settling tanks contained in a 60'x90' concrete containment area with 2'-6" concrete walls.
 $60 \times 90 \times 0.0148 = 79.9 \text{ bbls./inch}$
 $\times 30" = 2397 \text{ barrels of capacity}$
6/20/11 - Per Gary at DEL Energy, Inc. -
only 2000 barrels will be tied together
at the bottom.
TDR



33. **PROPOSED INJECTION VOLUMES**

- A. Indicate the estimated amount of saltwater to be injected into the proposed injection well per day:
AVERAGE: 1500 BBL MAXIMUM: 2000 BBL
- B. Indicate the method to be used to measure the actual amount of saltwater injected into the well:
Daily water tickets and BBL counter.

34. **PROPOSED INJECTION PRESSURES**

- A. Indicate the estimated pressure to be used for injection of saltwater into the proposed injection well:
AVERAGE: 1200 MAXIMUM: 1890
- B. Indicate the method to be used to measure the actual daily injection pressure:
Chart recorder

35. **PROPOSED CORRECTIVE ACTION**

Explain any corrective action proposed for wells penetrating the proposed injection formation or zone within the area of review:
n/a

36. **MAP.** Each application for a permit shall be accompanied by a map or maps showing and containing the following information:

- A. The subject tract of land on which the proposed injection well is to be located.
- B. The location of the proposed injection well on the subject tract established by an Ohio registered surveyor showing the distances in feet from the proposed well site to the boundary lines on the subject tract;
- C. The geographic location of all wells, penetrating the formation proposed for injection regardless of status, within the area of review;
- D. All holders of the land owner's royalty interest of record, or holders of the severed oil and gas mineral estates of record in the subject tract;
- E. All owners or operators of wells producing from or injecting into the same formation proposed as the injection formation.

37. **SCHEMATIC DRAWING OF SUBSURFACE CONSTRUCTION.** Label the schematic drawing below indicating size and setting depth of surface casing, intermediate (if any) and production casings; amount of cement used, measured or calculated tops of cement; size and setting depth of tubing; type and setting depth of packer; geologic name of injection zone showing top and bottom of injection interval. If the proposed input well design is substantially different from the schematic below, attach on a separate sheet a schematic of your proposal labeled with the above information.

SCHEMATIC OF SUBSURFACE CONSTRUCTION

The schematic diagram illustrates the subsurface construction of a well. It shows a vertical cross-section with several horizontal lines representing different components. On the left, labels indicate the casing and tubing sizes and depths: '9-3/4" SURFACE CASING @ 1010'', '7" PRODUCTION CASING @ 8215'', and '4" TUBING @ 8220''. On the right, a 'PACKER' is shown at a depth of '8200''. A 'RECEIVED' stamp is dated 'MAY 24 2011'. Handwritten notes include '8200' and '8220' with arrows pointing to specific depths, and 'TD 9184' and '9300' with arrows pointing to other depths. A 'By' line is present at the bottom right.

38. Public notice of an application for an enhanced recovery project is required by law. In addition, the applicant must submit, on an attached sheet, a list of the names and address of those persons required to receive personal notice in accordance with Rule 1501:9-5-05(E)(1), of the Ohio Administrative Code.

After submitting the application, and after a determination by the Division that it is complete as required by the rules of the Division, a legal notice must be published by the applicant in a newspaper of general circulation in the area of review. The legal notice must contain the information described in Rule 1501:9-5-05(E)(1) of the Ohio Administrative Code. A copy of the notice must be delivered to all owners or operators of wells within the area of review producing from or injecting into the same formation proposed as the injection formation. Proof of publication, publication date, and an oath as to the delivery to those entitled to receive personal notice under this method must be filed with the Division within thirty days after the Division determines that the application is complete.

In addition, notice of all applications for enhanced recovery projects will be published in the Division's Weekly Circular.

The undersigned hereby agrees to comply with all provisions for an enhanced recovery project as required by Chapter 1501:9-5 of the Ohio Administrative Code. In addition, the undersigned deposed and says that he shall conform to all provisions of Section 1509.072 of the Ohio Revised Code, and to all orders and rules issued by the Chief, Division of Mineral Resources Management.

Owner/Authorized Agent (Type or Print):

Nicholas C. Paparodis

Signature of Owner/Authorized Agent:

Title:

V.P. LAND OPERATIONS

Permanent Address of Home Office:

2761 Salt Springs Road, Youngstown, OH 44509

If signed by Authorized Agent, a certified copy of appointment of agent must be on file with the Division.

SWORN to and subscribed before me this 18 day of May, 2011.

(SEAL)

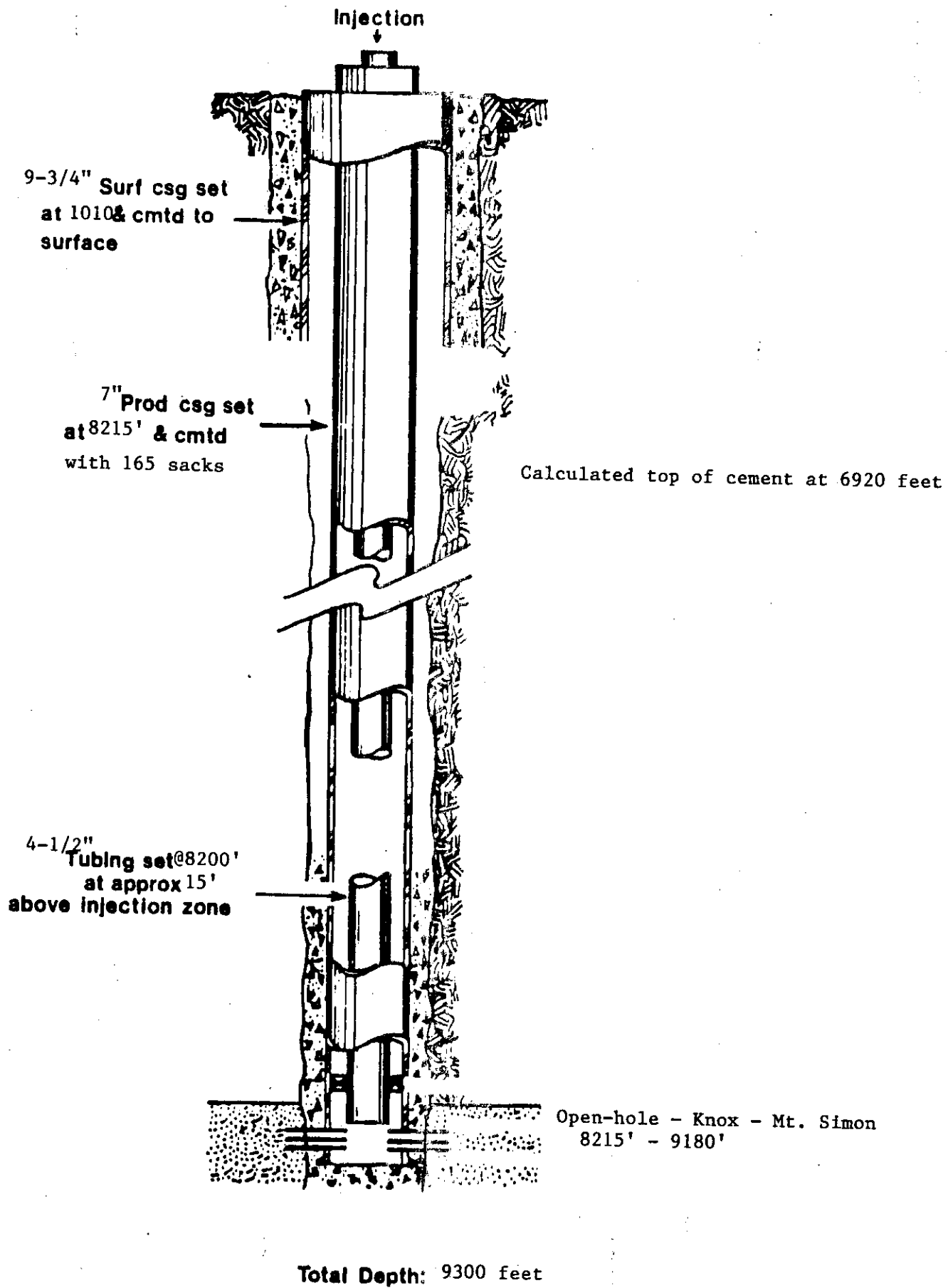
Notary Public



KIMBERLY A. LITTLE
MY COMMISSION EXPIRES
JUNE 1, 2014

Subsurface Construction For Injection Well

Maximum Injection Pressure: 1890 psi



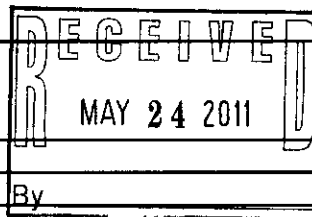
APPLICATION FOR A PERMIT (Form 1)
OHIO DEPARTMENT OF NATURAL RESOURCES
DIVISION OF MINERAL RESOURCES MANAGEMENT
2045 Morse Road, Building H-3
COLUMBUS, OHIO 43229-6693
(614) 265-6633

#21167
\$1,000.00

aPatto 19741

SEE INSTRUCTIONS ON PAGE 2 (BACK)

1. I, We (applicant) <u>D&L ENERGY, INC.</u>		2. Owner #: <u>2651</u>	
(address) <u>2761 SALT SPRINGS RD., YOUNGSTOWN, OH 44509</u>		Phone #: <u>330-792-9524</u>	
hereby apply this date <u>MAY 18</u> , 20 <u>11</u>		for a permit to:	
<input type="checkbox"/> Reissue (check appropriate blank)		<input type="checkbox"/> Revised Location	
<input checked="" type="checkbox"/> Drill New Well		<input type="checkbox"/> Plug Back	
<input type="checkbox"/> Drill Directionally		<input type="checkbox"/> Plug and Abandon	
<input type="checkbox"/> Drill Horizontally		<input type="checkbox"/> Orphan Well Program	
<input type="checkbox"/> Convert		<input type="checkbox"/> Deepen	
<input type="checkbox"/> Reopen		<input type="checkbox"/> Temporary Inactive	
3. TYPE OF WELL:			
<input type="checkbox"/> Oil & Gas		<input type="checkbox"/> Annular Disposal	
<input type="checkbox"/> Stratigraphic Test		<input checked="" type="checkbox"/> Saltwater Injection	
<input type="checkbox"/> Solution Mining*		<input type="checkbox"/> Gas Storage	
<input type="checkbox"/> Input/Injection		<input type="checkbox"/> Other (explain):	
<input type="checkbox"/> Enhanced Recovery* (* if checked, select appropriate box below)		<input type="checkbox"/> Observation	
<input type="checkbox"/> Water Supply		<input type="checkbox"/> Production/Extraction	
4. MAIL PERMIT TO: D&L ENERGY, INC. 2761 SALT SPRINGS RD. YOUNGSTOWN, OH 44509		20. TYPE OF TOOLS:	
		<input type="checkbox"/> Cable	
		<input type="checkbox"/> Cable / Air Rotary	
		<input type="checkbox"/> Cable / Fluid Rotary	
		<input type="checkbox"/> Cable / Air / Fluid Rotary	
		<input type="checkbox"/> Air Rotary	
		<input checked="" type="checkbox"/> Air / Fluid Rotary	
		<input type="checkbox"/> Fluid Rotary	
		<input type="checkbox"/> Service Rig	
5. COUNTY: <u>MAHONING</u>		21. PROPOSED CASING PROGRAM:	
6. CIVIL TOWNSHIP: <u>CITY OF CAMPBELL</u>			
7. SECTION: <u>8. LOT:</u>			
9. FRACTION: <u>10. QTR TWP:</u>			
11. TRACT / ALLOT:		11-3/4" FOR 100 FT, 9-3/4" FOR 400 FT CEMENTED TO SURFACE, 7" CEMENTED TO SURFACE	
12. WELL #: <u>3</u>			
13. LEASE NAME: <u>NORTHSTAR KHALIL</u>			
14. PROPOSED TOTAL DEPTH: <u>9300</u>			
15. PROPOSED GEOLOGICAL FORMATION: <u>KNOX-PRECAMBRIAN</u>			
16. DRILLING UNIT IN ACRES (must be same as acres indicated on plat): <u>6.7</u>		22. FIRE AND MEDICAL DEPARTMENT TELEPHONE NUMBERS: (closest to well site)	
		Fire: <u>911</u>	
		Medical: <u>911</u>	
17. IF PERMITTED PREVIOUSLY:		23. MEANS OF INGRESS & EGRESS:	
API #:		Township Road:	
OWNER:		County Road:	
WELL #:		Municipal Road:	
LEASE NAME:		State Highway: <u>STATE ROUTE 422</u>	
TOTAL DEPTH:			
GEOLOGICAL FORMATION:			
18. IF SURFACE RIGHTS ARE OWNED BY THE OHIO DEPARTMENT OF NATURAL RESOURCES		24. IS THE WELL LOCATION OR PRODUCTION FACILITIES WITHIN AN URBANIZED AREA AS DEFINED BY 1509.01(Y) ?	
Division Name: <u>N/A</u>		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Division Phone:			
19. LANDOWNER ROYALTY INTEREST:			
Is There An Attached List? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
Name: <u>KAMAL KHALIL</u>			
Address: <u>19 CREED CR., CAMPBELL, OH 44405</u>			
Name:			
Address:			
Name:			
Address:			



I, the undersigned, being first duly sworn, depose and state under penalties of law, that I am authorized to make this application, that this application was prepared by me or under my supervision and direction, and that the facts stated herein are true, correct, and complete, to the best of my knowledge.

I, the undersigned, further depose and state that I am the person who has the right to drill on the tract or drilling unit and to drill into and produce from a pool and to appropriate the oil or gas that I produce therefrom either for myself or others as described in this application. And furthermore, I the undersigned, being duly sworn, depose and state at this time that I am not liable for any final nonappealable order of a court for damage to streets, roads, highways, bridges, culverts, or drainage ways pursuant to Section 5577.12 of the Ohio Revised Code (ORC). I, the undersigned, further depose and state that all notices required by 1509.06 (A) (9) ORC for this application have been duly provided by me. If applying for a permit to plug and abandon a well, I hereby certify that the written notices, as required in Section 1509.13, ORC, have been given.

That I hereby agree to conform with all provisions of Chapter 1509, ORC, and Chapter 1501, OAC, and all orders and conditions issued by the Chief, Division of Mineral Resources Management.

Signature of Owner/Authorized Agent NICHOLAS PAPARODIS

Name (Type or Print) NICHOLAS PAPARODIS Title V.P. LAND OPERATIONS

If signed by Authorized Agent, a certificate of appointment of agent must be on file.

Sworn to and subscribed before me this the 18 day of may, 20 11

Kimberly A. Little
(Notary Public)



KIMBERLY A. LITTLE
MY COMMISSION EXPIRES
JUNE 1, 2014
(Date Commission Expires)

RESTORATION PLAN (Form 4)

Ohio Department of Natural Resources

Division of Mineral Resources Management, 2045 Morse Road, Bldg. H-3, Columbus OH 43229-6693

1. DATE OF APPLICATION: <u>18-May-11</u>		3. API #:	
2. OWNER NAME, ADDRESS, & TELEPHONE NO.: D&L ENERGY, INC., 2761 SALT SPRINGS RD., YOUNGSTOWN, OH 44509		4. WELL #: <u>13</u>	
		5. LEASE NAME: <u>NORTHSTAR KHALIL</u>	
		6. PROPERTY OWNER: <u>KAMAL KHALIL</u>	
		7. COUNTY: <u>MAHONING</u>	
		8. CIVIL TOWNSHIP: <u>CITY OF CAMPBELL</u>	
		9. SECTION: <u>10</u> 10. LOT:	
11. CURRENT LAND USE:		17. TYPE OF WELL:	
<input type="checkbox"/> Cropland <input checked="" type="checkbox"/> Commercial <input type="checkbox"/> Pasture <input type="checkbox"/> Idle Land <input type="checkbox"/> Wetlands <input type="checkbox"/> Recreational <input type="checkbox"/> Residential <input type="checkbox"/> Industrial <input type="checkbox"/> Unreclaimed strip mine <input type="checkbox"/> Woodland: <input type="checkbox"/> Broadleaf <input type="checkbox"/> Needlelike		<input type="checkbox"/> Oil <input type="checkbox"/> Gas <input checked="" type="checkbox"/> Other	
12. SLOPE GRADIENT & LENGTH DETERMINED FROM:		18. STEEPEST SLOPE GRADIENT CROSSING SITE:	
<input type="checkbox"/> Ground Measurement <input type="checkbox"/> U.S. Geological Survey Topographical Maps <input checked="" type="checkbox"/> Other: (explain) <u>COUNTY GIS MAP</u>		<input type="checkbox"/> 0 to 2% <input checked="" type="checkbox"/> 2.1 to 8% <input type="checkbox"/> 8.1 to 10% <input type="checkbox"/> 10.1 to 24% <input type="checkbox"/> greater than 24%	
13. TYPE OF FALL VEGETAL COVER:		19. LENGTH OF STEEPEST SLOPE CROSSING SITE:	
<input checked="" type="checkbox"/> Little or no vegetal cover <input type="checkbox"/> Short grasses <input type="checkbox"/> Tall weeds or short brush (1 to 2 ft.) <input type="checkbox"/> Brush or bushes (2 to 6 ft.) <input type="checkbox"/> Agricultural crops <input type="checkbox"/> Trees with sparse low brush <input type="checkbox"/> Trees with dense low brush		<input checked="" type="checkbox"/> 1 to 100 ft. <input type="checkbox"/> 101 to 200 ft. <input type="checkbox"/> 201 to 400 ft. <input type="checkbox"/> greater than 400 ft.	
14. SOIL & RESOILING MATERIAL AT WELLSITE:		20. RESTORATION OF DRILLING PITS: **	
<input checked="" type="checkbox"/> Stockpile and protect topsoil to be used when preparing seedbed <input type="checkbox"/> Use of soil additives (e.g., lime, fertilizer) <input type="checkbox"/> No resoiling planned <input type="checkbox"/> Proposed alternative _____		<input checked="" type="checkbox"/> Haul drilling fluids and fill pits <input type="checkbox"/> Use steel circulating tanks <input type="checkbox"/> Proposed alternative _____	
15. DISPOSAL PLAN FOR TREES AND TREE STUMPS:		21. BACKFILLING AND GRADING AT SITE:	
<input checked="" type="checkbox"/> No trees disturbed <input type="checkbox"/> Haul to landfill <input type="checkbox"/> Cut into firewood <input type="checkbox"/> Sell to lumber <input type="checkbox"/> Bury with landowner's approval company <input type="checkbox"/> Mulch small trees and branches, erosion control <input type="checkbox"/> Use for wildlife habitat with landowner approval <input type="checkbox"/> Proposed alternative _____		<input type="checkbox"/> Construct diversions channeled to naturally established drainage systems <input type="checkbox"/> Construct terraces across slopes <input checked="" type="checkbox"/> Grade to approximate original contour <input type="checkbox"/> Grade to minimize erosion & control offsite runoff <input type="checkbox"/> Proposed alternative _____	
16. SURFACE AND SUBSURFACE DRAINAGE FACILITIES:		22. VEGETATIVE COVER TO BE ESTABLISHED AT SITE:	
<input checked="" type="checkbox"/> No existing drainage facilities for removal of surface and/or subsurface water <input type="checkbox"/> Tile drainage system underlying land to be disturbed <input type="checkbox"/> Drain pipe(s) underlying land to be disturbed <input type="checkbox"/> Surface drainage facilities on land to be disturbed		<input checked="" type="checkbox"/> Seeding plan <input type="checkbox"/> Sod <input type="checkbox"/> Agricultural crops <input type="checkbox"/> Trees and/or Bushes <input type="checkbox"/> Proposed alternative _____	
17. CURRENT LAND USE OF PATH OF ACCESS ROAD:		23. ADDITIONAL HOLES:	
<input type="checkbox"/> Cropland <input type="checkbox"/> Pasture <input checked="" type="checkbox"/> Commercial <input checked="" type="checkbox"/> Idle land <input type="checkbox"/> Wetlands <input type="checkbox"/> Recreational <input type="checkbox"/> Industrial <input type="checkbox"/> Residential <input checked="" type="checkbox"/> Unreclaimed strip mine <input type="checkbox"/> Woodland: <input type="checkbox"/> Broadleaf <input type="checkbox"/> Needlelike		<input checked="" type="checkbox"/> Rat/Mouse, if used, will be plugged	
24. PROPOSED OR CURRENT LENGTH OF ACCESS ROAD:		25. CURRENT LAND USE OF PATH OF ACCESS ROAD:	
<input checked="" type="checkbox"/> 100 ft. or less <input type="checkbox"/> 101 to 500 ft. <input type="checkbox"/> 501 to 1500 ft. <input type="checkbox"/> greater than 1500 ft.			

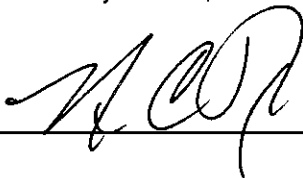
****PITS MUST BE FILLED WITHIN TWO MONTHS AFTER COMMENCEMENT OF THE WELL AND WITHIN FOURTEEN DAYS AFTER COMMENCEMENT OF THE WELL IN AN URBANIZED AREA.**

REQUIRED BY SECTION 1509.06 (A)(10), OHIO REVISED CODE -- FAILED TO SUBMIT MAY RESULT IN AN ASSESSMENT OF CRIMINAL FINES NOT LESS THAN \$100.00 NOR MORE THAN \$2,000.00 OR CIVIL PENALTIES NOT LESS THAN \$4,000.00.

26. SURFACING MATERIAL FOR ACCESS ROAD: <input checked="" type="checkbox"/> Gravel <input type="checkbox"/> Brick and/or tile waste <input type="checkbox"/> Slag <input type="checkbox"/> Crushed stone <input type="checkbox"/> No surfacing material to be used <input type="checkbox"/> Proposed alternative _____	29. STEEPEST SLOPE GRADIENT ON ACCESS ROAD: <input checked="" type="checkbox"/> 0 to 5% <input type="checkbox"/> 6 to 10% <input type="checkbox"/> greater than 10%
27. PATH OF ACCESS ROAD TO BE DETERMINED BY: <input type="checkbox"/> Landowner <input type="checkbox"/> Contractor <input type="checkbox"/> Existing access road <input checked="" type="checkbox"/> Operator	30. APPROXIMATE LENGTH OF STEEPEST SLOPE ON ROAD: <input type="checkbox"/> 0 to 100 ft. <input type="checkbox"/> 101 to 200 ft. <input checked="" type="checkbox"/> 201 to 400 ft. <input type="checkbox"/> greater than 400 ft.
28. GRADING AND EROSION CONTROL PRACTICE ON ROAD: <input checked="" type="checkbox"/> Diversions <input type="checkbox"/> Filter strips <input type="checkbox"/> Drains <input type="checkbox"/> Riprap <input type="checkbox"/> Open top culverts <input type="checkbox"/> Water breaks <input type="checkbox"/> Outsloping of road <input type="checkbox"/> Pipe culverts <input type="checkbox"/> Proposed alternative _____	31. HAS LANDOWNER RECEIVED A COPY OF THIS RESTORATION PLAN? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

The undersigned hereby agrees to implement all restoration operations identified on this form, and conform to all provisions of Section 1509.072 of the Ohio Revised Code, and to all Orders and rules issued by the Chief, Division of Mineral Resources Management.

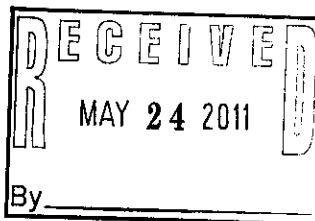
Signature of Owner/Authorized Agent _____



Name (Typed or Printed) _____ NICHOLAS PAPARODIS

Date 5/10/2011

RESTORATION PLAN MUST BE SUBMITTED TO THE DIVISION IN DUPLICATE.



SR

Casing Ticket

API Well Number:

34-099-2-3157-00-00

Sent to Columbus

OCT 20 2011

(to Tomastik)

Record of Casing, Cementing and Mudding

Well Owner: **D & L ENERGY INC**

Lease Name: **NORTHSTAR KHALIL (SWIW #11) 3**

Well No. **3**

County: **MAHONING**

Township: **COITSVILLE**

Driller: **UNION DRLG**

Tool

Air Rotar

Refer Top Ground Level Lat: **0.000000**

Long: **0.000000**

Date Spudded:

Date Completed:

Inspector **ROBERTS CARL**

☐ AD Meets Requirements

☐ AD on Permit

Comments: TD of this well was 9581'. It was drilled with a 9 7/8" bit. The rig crew ran 178 joints of 7 5/8", 29.70#, R-3, N-80, casing. Set at 8098'. There was a DV Tool, Baffle, shoe, and 60 bow centralizes run. Universal dropped the packer plug. Displaced 379 barrels of mud. Bumped packer to 1575psi. Packer set. Released pressure and opened DV tool with 3000psi. Tool opened fine. Had full circulation throughout the job. Mixed 50 barrels of gel and 221 sacks of Type I, with 5% salt, 1% CFL 117, .25% CR-3. Displaced and bumped plug to 1700psi. Held for 3 minutes. Plug down at 17:40, 10/3/11. Job complete.

FLD

*Hole 4 Field Entry

CONDITION

Bot **9581** Diam **9.875** Top **0** LENGTH **0** Set Dt

String Comments Casing
Condition, Weight and
Cement Basket

BOC **0** TOC **0** DT_CM **0** ☐ WITNESSED

CMT_CON **0** INSPECTOR **ROBERTS CARL**

CLASS_CMT: **0** SACKS **0** YIELD **0** WEIGHT **0**

Cement 1

CLASS_CMT2: **0** SACKS2 **0** YIELD **0** WEIGHT **0**

Cement 2

FLD

*Production Casing Field Entry

CONDITION

New

Bot

8089

Diam

7.625

Top

0

LENGTH

Set Dt

10/3/2011

String Comments Casing
Condition, Weight and
Cement Basket

New, N-80, 7 5/8", 29.70#, R-3 casing

BOC

0

TOC

0

DT_CM



WITNESSED

CMT_CON

UNIVERSAL WELL SERVICES

INSPECTOR

ROBERTS CARL

CLASS_CMT:

Thixotropic Cement

SACKS

221

YIELD

1.2

WEIGHT

15.7

Cement 1

Type 1, 5% salt, 1%CFL 117, .25%CR-3

CLASS_CMT2:

SACKS2

YIELD

WEIGHT

Cement 2

INVOICE NO. _____

STAGE NO. _____

CUSTOMER Rx EnergyLEASE NAME North Star KHILL

JOB LOG

DATE 10-3-11

NO. OF SACKS	COMPOSITION OF CEMENT	YIELD	GAL. WTR/SK	DENSITY	BBL. OF MIX WTR.	CU. FT. OF SLURRY	BBL. OF SLURRY
1. 321	Type 1, 5% H ₂ O, 1% CLM - .25% CR-3	2.10	52	15.2	22.4	265.2	42.2
2.							
3.							
TOTAL					22.4	265.2	42.2

CIRCULATE CEMENT TO SURFACE

☐ Yes
 ☐ No
 ☒ Not Applicable

JOB TYPE

☐ Surface
 ☒ Longstring
 ☐ Acid

☐ Other _____

	NEW USED	SIZE	FROM	TO	WEIGHT	MAXIMUM PSI ALLOWANCE
CASING	N	1 1/2	0	8010	27.7	
TUBING	N	5/8	0	8000	40.5	
OPEN HOLE		7 1/2	8055	9560		
PERFORATIONS						
DISPLACEMENT CAPACITY	370.4-381.5 BBL.			DISPLACEMENT DEPTH	8069	FT.

TIME	RATE (BPM)	VOLUME (BBL)	PRESSURE (PSI)		DESCRIPTION OF STAGE OR EVENT
			TUBING	CASING	
0100					Arrive Location
1105					Safety Meeting
1113	-	-		-	Pick up Pump
1118	-	-		0-7200	PSI TEST
1120				7200	Release PSI / open well
1123	2.025	158		0-5500	Break Circulation
1242	-	-		-	Drop Packer Plug
1243	4.050	379		150-125	Displace w/ mud
1430	4.0			40-725	Land Plug
1430				265-850	Hold 9 min
1440	-	-		850-1000	Bump
1441	-	-		1000-1200	Bump
1441	-	-		1200-1150	Bump
1442	-	-		1150-1100	Bump
1443	-	-		1100-1050	Packer Set

REMARKS _____

SERVICE ENGINEER

CUSTOMER REPRESENTATIVE

R/SSamuel Welch

INVOICE NO. _____



CUSTOMER _____

STAGE NO. _____

LEASE NAME _____

JOB LOG

DATE _____

	NO. OF SACKS	COMPOSITION OF CEMENT	YIELD	GAL. WTR/SK	DENSITY	BBL. OF MIX WTR.	CU. FT. OF SLURRY	BBL. OF SLURRY
1.								
2.								
3.								
TOTAL								

CIRCULATE CEMENT TO SURFACE
☐ Yes ☐ No ☐ Not Applicable
JOB TYPE
☐ Surface ☐ Longstring ☐ Acid

☐ Other _____

	NEW USED	SIZE	FROM	TO	WEIGHT	MAXIMUM PSI ALLOWANCE
CASING						
TUBING						
OPEN HOLE						
PERFORATIONS						
DISPLACEMENT CAPACITY	BBL.		DISPLACEMENT DEPTH		FT.	

TIME	RATE (BPM)	VOLUME (BBL)	PRESSURE (PSI)		DESCRIPTION OF STAGE OR EVENT
			TUBING	CASING	
1444				150-050	Bump PSI on Pump
1447				050-100	Release valve
1451				1,000-0	Release PSI
1454	10-1.2			0-300-100	Open DV Tool
1512	2.0	1		50	Backflow test
1513	2.7	20		50	Mix Sweep
1521	2.7	30		80	Mix Gel
1542	2.7	5		100	H ₂ O pump
1544	247.2	472		150-0	Mix Cement
1545	-	-		-	Shut Down/hold on/Drif Plug
1610	50-30			0-500	Drif Plug
1741				500	Load Plug - Bump
1715	-			500-1700	Drif Plug over 1101 3/4"
1718				1700-0	Release PSI
1750					Job Complete

REMARKS _____

SERVICE ENGINEER

CUSTOMER REPRESENTATIVE

Clarksburg, WV

OPERATOR
Rex Energy
COMPANY REP
Aaron Wilhite

FAX #

COMP PHONE #

FIELD

WELL NO.

Northstar Khalil #3 SWD

BHP

BHT

MAX DEV.

ZONE DEV.

DESCRIPTION

RIG NAME

UDI 58

RIG PHONE #

SCREEN SIZE

PREPARED BY

Trey Partin

PREP PHONE #

304-476-3779

STARTING WELL

SAND SIZE

SIZE
7-5/8

WEIGHT
29.70

THREAD
LT&C

GRADE
N-80

DATE SUBMITTED
03OCT2011

JOB # (version #)

COMPLETION FLUID

COATING (type)

TUBING

JOB REPORT #
SST-135203

WELL TYPE

WORK STRING

BAKER HUGHES

WellSchematic	Description	ID	OD	Length	DEPTH
	1. Material Number: SHORT DESCRIPTION: 178 Joints 7-5/8 29.70# N-80 LT&C	6.875 in	7.625 in	8,071.81	8068.82 ft
	2. Material Number: SHORT DESCRIPTION: WTF DV Tool	6.76 in	8.875 in	2.75	8071.57 ft
	3. Material Number: SHORT DESCRIPTION: Top Lift Sub	6.875 in	7.625 in	6.13	8077.70 ft
	4. Material Number: SHORT DESCRIPTION: ISOZONE ECP Packer. Element from 8,089 ft to 8,079 ft.	6.875 in	9.000 in	13.25	8090.95 ft
	5. Material Number: SHORT DESCRIPTION: Bottom Sub for ECP Packer	6.875 in	7.625 in	2.17	8093.12 ft
	6. Material Number: SHORT DESCRIPTION: WTF Float Collar with baffel for dart	6.875 in	8.6875 in	1.30	8094.42 ft
	7. Material Number: SHORT DESCRIPTION: WTF Float Shoe	6.875 in	8.6875 in	1.58	8096.00 ft

7/5/8 29.7# N-80 LTC
02621

REX ENERGY NORTHSTAR KHALIL #3 SWD

7 5/8 29.7# N-80 LTC

FINAL CASING RUN ORDER WITH HARDWARE

Date:	10/3/2011	Well:	3	Rig:	UDI 52	TD/TVD:	9581	TD/MD:	9581
Csg Size:	7.625	Csg Wt/Ft.	29.70	Csg Grade	N-80 LTC	Capacity:	0.07450	ID:	6.750
Mud Wt:	10.3	Buoyancy Factor:		0.8366	TORQUE SPEC'S	Block Wt.	17,000	DRIFT:	6.750
11- 5m	15.60	Displacement:			5670	Pump	BBLs/STK:	0.1082	0.95
*Fill in Highlighted Areas		Cumulative	Joint #	Casing @	Casing	Shoe Track:	76.10	DRIFTED OK :	YES
Joint # RIH	Length	Length	On Rack	8096.00	Hardware	String Wt:	Dsplment:	Capacity	Strokes
FLOAT SHOE	1.58	1.58		8094.42		17039	0.0172	0.1	1
LAND COLLAR	1.30	2.88		8093.12		17072	0.0314	0.2	2
PACKER	21.55	24.43		8071.57		17607	0.2663	1.8	17
DV TOOL	2.75	27.18		8068.82	BOW CENTRALIZER	17675	0.2963	2.0	19
1	45.35	72.53		8023.47		18802	0.7906	5.4	50
2	45.38	117.91		7978.09	BOW CENTRALIZER	19930	1.2852	8.8	81
3	45.33	163.24		7932.76	BOW CENTRALIZER	21056	1.7793	12.2	112
4	45.42	208.66		7887.34	BOW CENTRALIZER	22185	2.2744	15.5	144
5	45.37	254.03		7841.97	BOW CENTRALIZER	23312	2.7689	18.9	175
6	45.36	299.39		7796.61	BOW CENTRALIZER	24439	3.2633	22.3	206
7	45.36	344.75		7751.25	BOW CENTRALIZER	25566	3.7577	25.7	237
8	45.35	390.10		7705.90		26693	4.2521	29.1	269
9	45.32	435.42		7660.58	BOW CENTRALIZER	27819	4.7460	32.4	300
10	45.30	480.72		7615.28		28944	5.2398	35.8	331
11	45.32	526.04		7569.96	BOW CENTRALIZER	30071	5.7338	39.2	362
12	45.38	571.42		7524.58		31198	6.2284	42.6	393
13	45.36	616.78		7479.22	BOW CENTRALIZER	32325	6.7228	46.0	425
14	45.32	662.10		7433.90		33451	7.2168	49.3	456
15	45.36	707.46		7388.54	BOW CENTRALIZER	34578	7.7112	52.7	487
16	45.37	752.83		7343.17		35706	8.2058	56.1	518
17	45.31	798.14		7297.86	BOW CENTRALIZER	36831	8.6996	59.5	550
18	45.43	843.57		7252.43		37960	9.1948	62.8	581
19	45.56	889.13		7206.87	BOW CENTRALIZER	39092	9.6914	66.2	612
20	45.35	934.48		7161.52		40219	10.1857	69.6	643
21	45.40	979.88		7116.12	BOW CENTRALIZER	41347	10.6806	73.0	675
22	45.39	1,025.27		7070.73		42475	11.1753	76.4	706
23	45.30	1,070.57		7025.43	BOW CENTRALIZER	43600	11.6691	79.8	737
24	45.37	1,115.94		6980.06		44728	12.1636	83.1	768
25	45.32	1,161.26		6934.74	BOW CENTRALIZER	45854	12.6576	86.5	800
26	45.31	1,206.57		6889.43		46980	13.1515	89.9	831
27	45.36	1,251.93		6844.07	BOW CENTRALIZER	48107	13.6459	93.3	862
28	45.36	1,297.29		6798.71		49234	14.1403	96.6	893
29	45.32	1,342.61		6753.39	BOW CENTRALIZER	50360	14.6343	100.0	924
30	45.35	1,387.96		6708.04		51487	15.1286	103.4	956
31	45.41	1,433.37		6662.63	BOW CENTRALIZER	52615	15.6236	106.8	987
32	45.38	1,478.75		6617.25		53743	16.1182	110.2	1018
33	45.38	1,524.13		6571.87	BOW CENTRALIZER	54870	16.6129	113.5	1049
34	45.40	1,569.53		6526.47		55998	17.1077	116.9	1081
35	45.36	1,614.89		6481.11	BOW CENTRALIZER	57125	17.6021	120.3	1112
36	45.05	1,659.94		6436.06		58245	18.0932	123.7	1143
37	45.00	1,704.94		6391.06	BOW CENTRALIZER	59363	18.5837	127.0	1174
38	44.60	1,749.54		6346.46		60471	19.0698	130.3	1205
39	45.31	1,794.85		6301.15	BOW CENTRALIZER	61597	19.5637	133.7	1236
40	45.37	1,840.22		6255.78		62724	20.0582	137.1	1267
41	45.30	1,885.52		6210.48	BOW CENTRALIZER	63850	20.5520	140.5	1298
42	45.35	1,930.87		6165.13		64976	21.0463	143.8	1329
43	45.40	1,976.27		6119.73	BOW CENTRALIZER	66104	21.5411	147.2	1361
44	45.33	2,021.60		6074.40		67231	22.0352	150.6	1392
45	45.31	2,066.91		6029.09	BOW CENTRALIZER	68357	22.5291	154.0	1423
46	45.57	2,112.48		5983.52		69489	23.0258	157.4	1455
47	45.38	2,157.86		5938.14	BOW CENTRALIZER	70616	23.5205	160.8	1486
48	45.40	2,203.26		5892.74		71744	24.0153	164.1	1517
49	45.39	2,248.65		5847.35		72872	24.5101	167.5	1548
50	45.29	2,293.94		5802.06	BOW CENTRALIZER	73998	25.0037	170.9	1579
51	45.33	2,339.27		5756.73		75124	25.4978	174.3	1611
52	45.31	2,384.58		5711.42		76250	25.9917	177.7	1642
53	45.35	2,429.93		5666.07		77377	26.4860	181.0	1673
54	45.36	2,475.29		5620.71	BOW CENTRALIZER	78504	26.9804	184.4	1704
55	45.40	2,520.69		5575.31		79632	27.4753	187.8	1736
56	45.34	2,566.03		5529.97		80758	27.9695	191.2	1767
57	45.33	2,611.36		5484.64		81885	28.4636	194.5	1798
58	45.33	2,656.69		5439.31	BOW CENTRALIZER	83011	28.9577	197.9	1829
59	45.33	2,702.02		5393.98		84137	29.4517	201.3	1860
60	45.36	2,747.38		5348.62		85264	29.9462	204.7	1892
61	45.40	2,792.78		5303.22		86392	30.4410	208.1	1923
62	45.38	2,838.16		5257.84	BOW CENTRALIZER	87520	30.9357	211.4	1954
63	45.35	2,883.51		5212.49		88647	31.4300	214.8	1985
64	45.41	2,928.92		5167.08		89775	31.9249	218.2	2017
65	45.38	2,974.30		5121.70		90902	32.4196	221.6	2048

66	45.32	3,019.62	5076.38	BOW CENTRALIZER	92029	32.9136	225.0	2079
67	45.37	3,064.99	5031.01		93156	33.4081	228.3	2110
68	45.32	3,110.31	4985.69		94282	33.9021	231.7	2142
69	45.35	3,155.66	4940.34		95409	34.3964	235.1	2173
70	45.38	3,201.04	4894.96	BOW CENTRALIZER	96536	34.8910	238.5	2204
71	45.36	3,246.40	4849.60		97663	35.3854	241.9	2235
72	45.36	3,291.76	4804.24		98790	35.8799	245.2	2267
73	45.35	3,337.11	4758.89		99917	36.3742	248.6	2298
74	45.33	3,382.44	4713.56	BOW CENTRALIZER	101044	36.8683	252.0	2329
75	45.38	3,427.82	4668.18		102171	37.3629	255.4	2360
76	45.36	3,473.18	4622.82		103298	37.8573	258.8	2391
77	45.33	3,518.51	4577.49		104424	38.3514	262.1	2423
78	45.30	3,563.81	4532.19	BOW CENTRALIZER	105550	38.8452	265.5	2454
79	45.36	3,609.17	4486.83		106677	39.3396	268.9	2485
80	45.36	3,654.53	4441.47		107804	39.8340	272.3	2516
81	45.37	3,699.90	4396.10		108931	40.3285	275.6	2548
82	45.32	3,745.22	4350.78	BOW CENTRALIZER	110058	40.8225	279.0	2579
83	45.34	3,790.56	4305.44		111184	41.3167	282.4	2610
84	45.38	3,835.94	4260.06		112312	41.8114	285.8	2641
85	45.40	3,881.34	4214.66		113440	42.3062	289.2	2672
86	45.37	3,926.71	4169.29	BOW CENTRALIZER	114567	42.8007	292.5	2704
87	45.33	3,972.04	4123.96		115693	43.2948	295.9	2735
88	45.34	4,017.38	4078.62		116820	43.7890	299.3	2766
89	45.36	4,062.74	4033.26		117947	44.2835	302.7	2797
90	45.38	4,108.12	3987.88	BOW CENTRALIZER	119075	44.7781	306.1	2829
91	45.31	4,153.43	3942.57		120200	45.2720	309.4	2860
92	45.33	4,198.76	3897.24		121327	45.7661	312.8	2891
93	45.29	4,244.05	3851.95		122452	46.2597	316.2	2922
94	45.36	4,289.41	3806.59	BOW CENTRALIZER	123579	46.7541	319.6	2953
95	45.33	4,334.74	3761.26		124705	47.2482	322.9	2985
96	45.35	4,380.09	3715.91		125832	47.7425	326.3	3016
97	45.36	4,425.45	3670.55		126959	48.2370	329.7	3047
98	45.36	4,470.81	3625.19	BOW CENTRALIZER	128086	48.7314	333.1	3078
99	45.35	4,516.16	3579.84		129213	49.2257	336.5	3110
100	45.34	4,561.50	3534.50		130340	49.7199	339.8	3141
101	45.34	4,606.84	3489.16		131466	50.2141	343.2	3172
102	45.37	4,652.21	3443.79	BOW CENTRALIZER	132594	50.7086	346.6	3203
103	45.33	4,697.54	3398.46		133720	51.2027	350.0	3234
104	45.31	4,742.85	3353.15		134846	51.6966	353.3	3266
105	45.32	4,788.17	3307.83		135972	52.1906	356.7	3297
106	45.31	4,833.48	3262.52	BOW CENTRALIZER	137098	52.6844	360.1	3328
107	45.40	4,878.88	3217.12		138226	53.1793	363.5	3359
108	45.36	4,924.24	3171.76		139353	53.6737	366.9	3391
109	45.33	4,969.57	3126.43		140479	54.1678	370.2	3422
110	45.33	5,014.90	3081.10	BOW CENTRALIZER	141605	54.6619	373.6	3453
111	45.32	5,060.22	3035.78		142731	55.1559	377.0	3484
112	45.38	5,105.60	2990.40		143859	55.6505	380.4	3515
113	45.36	5,150.96	2945.04		144986	56.1449	383.7	3547
114	45.30	5,196.26	2899.74	BOW CENTRALIZER	146112	56.6387	387.1	3578
115	45.37	5,241.63	2854.37		147239	57.1332	390.5	3609
116	45.42	5,287.05	2808.95		148367	57.6283	393.9	3640
117	45.41	5,332.46	2763.54		149496	58.1233	397.3	3672
118	45.27	5,377.73	2718.27	BOW CENTRALIZER	150621	58.6167	400.6	3703
119	45.33	5,423.06	2672.94		151747	59.1108	404.0	3734
120	45.36	5,468.42	2627.58		152874	59.6052	407.4	3765
121	45.36	5,513.78	2582.22		154001	60.0997	410.8	3796
122	45.40	5,559.18	2536.82	BOW CENTRALIZER	155129	60.5945	414.2	3828
123	45.33	5,604.51	2491.49		156255	61.0886	417.5	3859
124	45.33	5,649.84	2446.16		157382	61.5827	420.9	3890
125	45.36	5,695.20	2400.80		158509	62.0771	424.3	3921
126	45.36	5,740.56	2355.44	BOW CENTRALIZER	159636	62.5715	427.7	3953
127	45.63	5,786.19	2309.81		160770	63.0689	431.1	3984
128	45.35	5,831.54	2264.46		161896	63.5632	434.4	4015
129	45.31	5,876.85	2219.15		163022	64.0571	437.8	4046
130	45.34	5,922.19	2173.81	BOW CENTRALIZER	164149	64.5513	441.2	4078
131	45.37	5,967.56	2128.44		165276	65.0458	444.6	4109
132	45.38	6,012.94	2083.06		166404	65.5404	448.0	4140
133	45.36	6,058.30	2037.70		167531	66.0349	451.3	4171
134	45.31	6,103.61	1992.39	BOW CENTRALIZER	168657	66.5287	454.7	4203
135	45.35	6,148.96	1947.04		169783	67.0230	458.1	4234
136	45.35	6,194.31	1901.69		170910	67.5174	461.5	4265
137	45.30	6,239.61	1856.39		172036	68.0111	464.9	4296
138	45.35	6,284.96	1811.04	BOW CENTRALIZER	173163	68.5054	468.2	4327
139	45.35	6,330.31	1765.69		174289	68.9997	471.6	4359
140	45.34	6,375.65	1720.35		175416	69.4939	475.0	4390
141	45.38	6,421.03	1674.97		176543	69.9886	478.4	4421
142	45.32	6,466.35	1629.65	BOW CENTRALIZER	177670	70.4826	481.7	4452
143	45.33	6,511.68	1584.32		178796	70.9767	485.1	4484
144	45.35	6,557.03	1538.97		179923	71.4710	488.5	4515

02

Casing Ticket

Ohio Department of Natural Resource
Division of Mineral Resources Management
1855 Fountain Square Court, Building H3
Columbus, Ohio 43224
Form 55: Revised 12/97

Sent to Columbus

API Well Number:

34-099-2-3157-00-00

SEP 15 2011

Record of Casing, Cementing and Mudding

Well Owner:	2651 D & L ENERGY INC			Date Spudded:	08/18/2011
Lease Name:	NORTHSTAR KHALIL (SWIW #11)	3	Well No.	3	Date Completed:
County:	MAHONING	Township:		Inspector	HILL TOM
Driller:	UNION DRLG	Tool	Air Rotar	<input type="checkbox"/> AD Meets Requirements	
Refer Top	Ground Level	Lat:	0.000000	Long:	0.000000 <input type="checkbox"/> AD on Permit
Comments:	HL #2 13.5 inch TD at 1025' Surface casing was R-3 40.5 lb J55 New 10.75 inch pipe, set with guide shoe, float collar and 15 centralizers. Centralizers set every other joint. Operator ran 26 joints of 10.75 inch pipe, pipe set at 1019' KB actual pipe in hole 1003'. Operator Broke circulation, ran 1000 gallons of Sweep, 1000lb of gel and two 50lb bags of unicele. Operator then mixed cement ran 449 sacks of class A 3% CaCl.2% foam Chch and 1/4 sack of unicele. Operator displaced cement to 940'= 92.2 Bbl of fresh water. During displacement 30Bbl return of good cement to surface. 1019' X .3637 / 1.18= 314 sack operator ran 449 sacks. Displacement 940' / 10.19 = 92.24Bbls of fresh water to displace, operator ran 92.2Bbl. Cement water pH was 8. Checked MSDS sheet on Sweep, sweep is sodium acid pyrophosphate, MSDS sheet listed it as non-hazard. 150lbs of sweep ran in 1000 gallons of fresh water. No shows of gas during drilling surface hole. Operator tagged cement after breaking off, cement fell back 5 feet.				

FLD

*Hole 2 Field Entry

CONDITION

Bot 1025 Diam 13.5 Top 0 LENGTH Set Dt

String Comments Casing
Condition, Weight and
Cement Basket

BOC 0 TOC 0 DT_CM ☐ WITNESSED

CMT_CON INSPECTOR HILL TOM

CLASS_CMT: SACKS YIELD WEIGHT

Cement 1

CLASS_CMT2: SACKS2 YIELD WEIGHT

Cement 2

FLD

*Surface Casing Field Entry

CONDITION

New

Bot

1019

Diam

10.75

Top

0

LENGTH

Set Dt

9/2/2011

String Comments Casing
Condition, Weight and
Cement Basket

R-3 New 40.5lb pipe, guide shoe, float collar and 15 centralizers

BOC

0

TOC

0

DT_CM



WITNESSED

CMT_CON

UNIVERSAL WELL SERVICES

INSPECTOR

HILL TOM

CLASS_CMT:

Class A Cement

SACKS

449

YIELD

1.18

WEIGHT

15.6

Cement 1

1/4 sack of unicele, 3% CaCl, .2% foam chch

CLASS_CMT2:

SACKS2

YIELD

WEIGHT

Cement 2

3 4 0 9 9 2 3 1 5 7 1 4
Permit No.

(To be submitted with Activity Report)

RECORD OF CASING, CEMENTING AND MUDDING

Well Owner: DGL Energy INC
Lease Name: Northstar Khalil Well No. 3
County: Marioning Twp. Cortsville
Contractor: Union Drilling Rig #52
Type of Tools: ☒ ROTARY ☐ CABLE
Service Company: Universal
Procedure: ☒ PRESSURE ☐ GRAVITY
Plugging of: _____
House hole ☐ YES ☐ NO _____ SACKS
Bat hole ☐ YES ☐ NO _____ SACKS

CASING RECORD

SIZE	SET	REMARKS
10.75	1019'	J55 New 40.5LB

Formations: (if available) ☐ DL ☐ EL ☐ KB ☐ RF ☒ GL
NAME TOP BOTTOM
Sodium acid pyrophosphate (Sweep)
- Permit posted in dog house
- Is shows of gas. Cement 1120 pH &
28 joints of 10.75 Ran 26 1019' set 1003
MSDS - Says non hazardous 150LBS in 1000
30 Bbl return of cement to surface

Date Issued: 06/28/2011 Expiration Date: 06/27/2012
Spud Date: Month _____ Day _____ Year _____
Type of Job: ☒ SURFACE ☐ PRODUCTION ☐ OTHER
Type of Cement: Class A 3% Sacks: 2449
Amount of Mud: _____
Size of Hole: 13.5 DEPTH 1025 FT
Casing: SIZE 10.75 DEPTH 1019' set 1003 GL FT
Float Equipment: ☒ SHOE ☐ COLLAR ☐ OTHER
Special Equipment: Guide Shoe, float Collar
15 centrifuges
Cement/Mud Circulated to Surface: ☒ YES ☐ NO
Notification Received: ☒ YES ☐ NO
Job Witnessed by Inspector: ☒ YES ☐ NO
Annular Disposal indicated on permit: ☐ YES ☒ NO
Meets construction requirements for A.D. (Explain below if no or if remedial action is required). ☐ YES ☒ NO
DATE JOB COMPLETED 09/02/11

Remarks:
(attach cement/mud tickets if available)
R-3 40.5 J55
1000 gallon Sweep
1000 lb gel 2 Unice 50LB
Disp. 940
Float Collar
1019' x .3637 x 1.18 = 314 sacks running 449
Disp 940' x 10.19' = 9224Bbl

INVOICE NO. _____

CUSTOMER Rex

STAGE NO. _____

LEASE NAME Northstar Khali

JOB LOG

DATE 9-1-11

NO. OF SACKS	COMPOSITION OF CEMENT	YIELD	GAL. WTR/SK	DENSITY	BBL. OF MIX WTR.	CU. FT. OF SLURRY	BBL. OF SLURRY
1. 144	Type 1 3% Cell 2% Formich 1/4" Wick	1.18	5.2	15.6	55.5	529.8	94.3
2.	Unick						
3.							
TOTAL					55.5	529.8	94.3

CIRCULATE CEMENT TO SURFACE

☒ Yes
 ☐ No
 ☐ Not Applicable

JOB TYPE

☒ Surface
 ☐ Longstring
 ☐ Acid

☐ Other _____

	NEW USED	SIZE	FROM	TO	WEIGHT	MAXIMUM PSI ALLOWANCE
CASING	N	10 3/4	0	1019'	110.5	
TUBING						
OPEN HOLE						
PERFORATIONS						
DISPLACEMENT CAPACITY	92.2		BBL.	DISPLACEMENT DEPTH	940'	FT

TIME	RATE (BPM)	VOLUME (BBL)	PRESSURE (PSI)		DESCRIPTION OF STAGE OR EVENT
			TUBING	CASING	
0728					Safety meeting
0747	2	37.0		0/160	Crack circulation
0758	4	23.8		155	Wiper
0802	4	5		155	Spacer
0803	4	50		155	Gel & Unick
	4	2		155	Spacer
0814	4	94.3		155/0	Cement
		-		-	Shut down & drop plug
0834	4 1/2	92.2		0/400	Displace
0900	2			400/600	Bump the Float
0901				600	Shut down & shut in.
					Res line PSI.

REMARKS Good Returns 30 BBL.
 SERVICE ENGINEER Ron Lef
 CUSTOMER REPRESENTATIVE

REQUEST FOR CHANGE OF OWNER (Form 7)

OHIO DEPARTMENT OF NATURAL RESOURCES

Division of Oil and Gas Resources Management, 2045 Morse Road, Bldg. H-3, Columbus, OH 43229-6693

(614) 265-6633

A non-refundable fee of \$100.00 per well must accompany this form. Make checks payable to the Division of Oil and Gas Resources Management.

Number of wells to be transferred 1

Amount enclosed

\$100

✓ 11658

1. Date of Application: 22-Nov-11

2. Check Type of Request:



If Individual Transfer, indicate API number:

34-099-2-3157-00-00

If Multiple Transfer, list all API numbers and complete date on back of form.

3. COUNTY: MAHONING

12. Assignor Address and Telephone Number:

D&L Energy Energy, Inc.2761 Salt Springs Rd.Youngstown, OH 44509 1.330.792.95244. CIVIL TOWNSHIP: COITSVILLE5. WELL: 36. LEASE NAME: NORTHSTAR KHALIL

13. Assignee/Transferee:

Northstar #3, LLC

7. SECTION: _____ 8. LOT: _____

9. FRACTION: _____ 10. QTR TWP: _____

14. Owner Number: 8893

11. I, We (Assignor/Transferor)

D&L Energy, Inc.

15. Assignee Address & Telephone Number:

c/o R. E. Gas Development, LLC476 Rolling Ridge Drive, Suite 300State College, PA 16801

Owner # 2651 hereby requests that records on file with the Division of Oil and Gas Resources Management, ODNR, State of Ohio, be amended to reflect the change of owner of the oil and/or gas well described in 3 through 10. IF WELL HAS NOT BEEN SPUDDED, IT CANNOT BE TRANSFERRED

16. Exempt Domestic Well (see criteria for domestic wells on attached information sheet)

☐ Yes

(# acres _____)

☒ No

The spacing/acreage requirements in effect under Ohio law at the time the well(s) was drilled will remain in effect for as long the well(s) exists. A revised survey plat and appropriate fee must be submitted to the Division if any changes are made to the drilling unit on file at the Division.

ASSIGNOR/TRANSFEROR:

I, the undersigned, hereby agree to furnish any and all records and reports required by the Division of Oil and Gas Resources Management for compliance with Chapter 1509., ORC, and all rules of that Division for the period ending on the date of assignment. Furthermore, I hereby depose and state that all holders of royalty interests that are affected by this assignment or transfer will be properly notified in conformance with Section 1509.31, ORC. It is understood that my liabilities for this well **WILL NOT BE TERMINATED UNTIL I COMPLY WITH THE ABOVE.**

Ben W. Lupo

(Signature of Assignor/Transferor)

ASSIGNOR/TRANSFEROR:

D&L Energy, Inc.

(Printed or Typed)

STATE OF Ohio, COUNTY OF Mahoning, being first duly sworn by me, says that the information set forth herein is true and accurate. SWORN TO AND SUBSCRIBED BEFORE ME THIS 21 day of November, 2011.



KIMBERLY A. LITTLE
MY COMMISSION EXPIRES
JUNE 1, 2014

Kimberly A. Little

(Notary Public)

My Commission Expires 6/1/2014

NOTE FOR WELLS TRANSFERRED TO LANDOWNERS: The well you are purchasing for domestic use may require periodic servicing to maintain productivity. When the well becomes incapable of production, you are required to plug the well and restore the site in accordance with Division requirements. Any brine produced must be properly disposed in accordance with Chapter 1509., ORC. You should be aware after transfer, **ALL EXPENSES** incurred are the responsibility of the well owner.

ASSIGNEE/TRANSFeree:

I, the undersigned, depose and state that I am the owner of aforementioned oil and/or gas well and that I have the right to appropriate the oil or gas that I produce therefrom either for myself or others. I further depose and state that I shall comply with the assignor/transferor's Restoration Plan and will comply with the requirements of Chapter 1509., ORC, and Chapter 1501., OAC, for the disposal of brine. Further, it is understood that upon proper completion of this form, I will become the "owner" as defined under Chapter 1509., ORC, and I will comply with all laws, rules and orders by the Chief of the Division of Oil and Gas Resources Management.

NOV 29 2011

COMMONWEALTH OF PENNSYLVANIA

Northstar #3, LLC

Notarial Seal
Suzanne Marie Reynolds, Notary Public
Centre County
June 16, 2014

(Signature of Assignee/Transferee)

ASSIGNEE/TRANSFeree:

(Printed or Typed)

STATE OF PA, COUNTY OF Centre, being first duly sworn by me, says that the information set forth herein is true and accurate. SWORN TO AND SUBSCRIBED BEFORE ME THIS 22nd day of November, 2011.

(SEAL)

Suzanne Marie Reynolds

(Notary Public)

My Commission Expires 6/16/2014

DIVISION USE ONLY

☐ Certificate of Insurance☐ Authority & Organization Form☐ Transfer Fee

Check #

NR

Date transferred 11/30/201111-30-11

Initials

AM

Indicate under the status column whether the wells listed are producing or non-producing.

[illegible]

M

WELL COMPLETION RECORD (Form 8)

5 JG

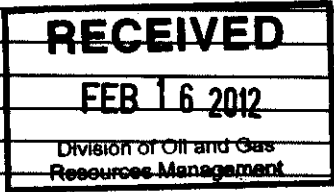
Ohio Department of Natural Resources
Division of Oil and Gas Resources Management
2045 Morse Road, Bldg. H-3, Columbus, OH 43229-6693
Telephone: 614-265-6633 Fax: 614-265-7998

This report is due in duplicate 60 days after completion of the well. If the permit has expired and the well was not drilled, check the box below, sign on reverse side (Back), and return to our office within 30 days after expiration.

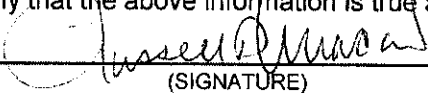
☐

1. Owner #: 2651		3. API #: 34-099-23157-0000																																				
2. Owner name, address and telephone numbers: B&L Energy 2761 Salt Springs Rd. Youngstown, OH 44509		4. Type of Permit: NEW WELL, SALT WATER INJECTION																																				
		5. County: MAHONING																																				
		6. Civil Township: COITSVILLE																																				
		7. Footage: 10769 FL 1012 WL																																				
8. Type of Well: Salt Water Disposal																																						
9. X: 41.08983308 Y: -80.6126089		21. Date drilling commenced: 8/28/2011																																				
10. Quad: CAMPBELL		22. Date drilling completed: 10/20/2011																																				
11. Section: 12. Lot:		23. Date put into production:																																				
13. Fraction: 14. Qtr.Twp:		24. Date plugged if dry:																																				
15. Tract:		25. Producing formation: NA																																				
16. Allot:		26. Deepest formation:																																				
17. Well #: 3		27. Driller's total depth: 9581 ft																																				
18. Lease Name: NORTHSTAR KHALIL		28. Logger's total depth: 9580 ft																																				
19. PTD: 9300 20. Drilling Unit: 6.7		29. Lost hole at _____ feet.																																				
30. Type of tools: <input type="checkbox"/> Cable <input type="checkbox"/> Fluid Rotary <input type="checkbox"/> Cable/Air Rotary <input type="checkbox"/> Cable/Fluid Rotary		31. Type of completion: <input checked="" type="checkbox"/> Open Hole <input checked="" type="checkbox"/> Through Casing <input type="checkbox"/> Slotted Liner																																				
<input type="checkbox"/> Air Rotary <input checked="" type="checkbox"/> Air/Fluid Rotary <input type="checkbox"/> Service Rig <input type="checkbox"/> Cable/Air Rotary/Fluid Rotary		32. Elevation: Ground Level 1036 ft Derrick Floor 1052 ft Kelly Bushing 1052 ft																																				
33. Perforated intervals and number of shots: 0																																						
34. Name of Frac Company: NA																																						
35. Method of shot, acid, or fracture treatments, production tests, pressures, etc.: SHOT: Lbs. _____ Qts. _____ Type _____ ACID: Gals. _____ Type _____ Percent _____ FRAC FLUIDS: Water (gals) NA Water (bbl) NA CO2 (tons) NA N2 (mscf) NA SAND: Lbs. NA Sk. NA PRESSURES (psi): Breakdown NA ATP NA ISIP NA 5 min. SIP NA Avg. Rate NA METHOD OF FLUID CONTAINMENT FLUIDS: Swab <input type="checkbox"/> Flowback <input type="checkbox"/> PIT: <input type="checkbox"/> FRAC TANK: <input type="checkbox"/> <div style="border: 2px solid black; padding: 5px; text-align: center; width: fit-content; margin: 10px auto;">RECEIVED FEB 16 2012 Division of Oil and Gas Resources Management</div> DATE TREATED: NA																																						
36. Amount of initial production per day: Natural: Gas _____ Oil _____ Brine _____ After Treatment: Gas 0 Oil 0 Brine 0 SERC Data: Number of Tanks: 0 Maximum Storage Capacity of all Tanks (bbls.) 0																																						
37. Casing and tubing record: Please indicate which is used (cement or mudding) <table border="1"><thead><tr><th>Type</th><th>Size</th><th>Feet Used in Drilling</th><th>Amount of Cement or Mud</th><th>Feet Left in Well</th></tr></thead><tbody><tr><td>Conductor/Drive Pipe:</td><td></td><td></td><td></td><td></td></tr><tr><td>Surface:</td><td>10.75</td><td>1019</td><td>CMT 449 sks</td><td>1017</td></tr><tr><td>Intermediate:</td><td>7.625</td><td>8096</td><td>CMT 221 sks</td><td>8080</td></tr><tr><td>Production:</td><td>4.5</td><td>7972</td><td></td><td>7972</td></tr><tr><td>Tubing:</td><td></td><td></td><td></td><td></td></tr><tr><td>Comments:</td><td></td><td></td><td></td><td></td></tr></tbody></table>				Type	Size	Feet Used in Drilling	Amount of Cement or Mud	Feet Left in Well	Conductor/Drive Pipe:					Surface:	10.75	1019	CMT 449 sks	1017	Intermediate:	7.625	8096	CMT 221 sks	8080	Production:	4.5	7972		7972	Tubing:					Comments:				
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Surface:	10.75	1019	CMT 449 sks	1017																																		
Intermediate:	7.625	8096	CMT 221 sks	8080																																		
Production:	4.5	7972		7972																																		
Tubing:																																						
Comments:																																						
38. Name of drilling contractor: UNION DRILLING																																						
39. Type of electrical and/or radioactivity logs run: (all logs must be submitted) LITHO-DENSITY, COMP. NEUTRON, GAMMA RAY,																																						
40. Name of logging company: SCHLUMBERGER																																						
DIVISION USE ONLY Log Submitted: <input checked="" type="checkbox"/> Confidential: <input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/> N FRAC DATA SUBMITTED: Pressure/Rate Graph <input type="checkbox"/> Record <input type="checkbox"/> Invoice <input type="checkbox"/> Well Class: SWIW																																						

FORMATION	TOP	BASE	Shows of oil, gas, fresh water, or brine; indicate depth or interval	REMARKS
Freshwater Strata				
Glacial Deposits				
Coal Seams				
1st Cow Run				
Buell Run				
2nd Cow Run				
Salt Sand				
Maxton Sand				
Keener Sand				
Big Injun Sand				
Squaw Sand				
Mississippian Shale				
Weir Sand				
Berea Sand				
Bedford Shale				
2nd Berea				
Ohio Shale				
Gantz				
Thirty Foot				
Gordon				
Cinnamon				
Marcellus				
Big Lime				
Sylvania				
Oriskany				
Bass Island				
Salina	4040			
Salt Section				
Newburg				
Lockport	4713			
Little Lime				
Packer Shell				
Stray Clinton	5210			
Red Clinton				
White Clinton				
Medina	5290			
Queenston	5462	7055		
Utica	7055	7348		gas shows
Trenton	7348			
Black River				
Gull River				
Glenwood Shale				
Knox Unconformity	8096			
Beekmantown				
Rose Run	8310			
Trempealeau/Copper Ridge				
"B" Zone				
Krysik				
Kerbel				
Conasauga				
Rome				
Mt. Simon	9280			
Granite Wash				
Middle Run				
Granite				



I certify that the above information is true and correct, to the best of my knowledge:



(SIGNATURE)

2/15/2012

(DATE)

Russell Macaw

(NAME typed or printed)

Vice President - Appalachian Regional Manager

(TITLE)

(REPRESENTING)