



# PLUGGING RECORD



NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

## I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: LAWS-01

Well owner: U.S. Department of Energy/Los Alamos National Laboratory Phone No.: 505-667-3005

Mailing address: P.O. Box 1663

City: Los Alamos State: New Mexico Zip code: 87545

## II. WELL PLUGGING INFORMATION:

1) Name of well drilling company that plugged well: Boart Longyear

2) New Mexico Well Driller License No.: 1161 Expiration Date: 10/31/2014

3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): Boart Longyear

4) Date well plugging began: 7/29/14 Date well plugging concluded: 8/2/14

5) GPS Well Location: East: 1649524.5  
North: 1770854.0

*Well coordinates are New Mexico State Plane Grid Coordinates, Central Zone (North American Datum, 1983 [NAD 1983]).*

6) Depth of well confirmed at initiation of plugging as: 278 ft below ground level (bgl),  
by the following manner: Manual tag line measurement

7) Static water level measured at initiation of plugging: 154.4 ft bgl

8) Date well plugging plan of operations was approved by the State Engineer: 07/03/2014

9) Were all plugging activities consistent with an approved plugging plan? No If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

LAWS-01 was proposed to be plugged/abandoned with cement grout placed from bottom to top with a tremie pipe. Hydrated bentonite chips were placed from TD (278 ft bgl) to 150.9 ft bgl with a tremie pipe. Portland Type I/II cement was placed from 150.9 to 2.0 ft bgl with a tremie pipe. The surface and well casings were cut level with ground surface and a concrete surface plug was emplaced from 2.0 ft bgl to surface.

- 10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

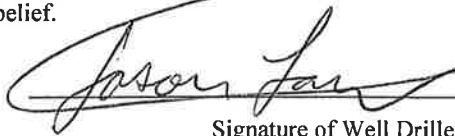
For each interval plugged, describe within the following columns:

Depth (ft bgl)	Plugging Material Used (include any additives used)	Volume of Material Placed (gallons)	Theoretical Volume of Borehole/ Casing (gallons)	Placement Method (tremie pipe, other)	Comments ("casing perforated first", "open annular space also plugged", etc.)
0 2	Concrete	2.2 gallons	1.5 gallons	Other	Surface plug
	Portland Type I/II Cement	124.9 gallons	87.5 gallons	Tremie	
150.9	3/8-in. Hydrated Bentonite Chips	68.1 gallons	74.8 gallons	Tremie	
278					

MULTIPLY	BY	AND OBTAIN
cubic feet x 7.4805	=	gallons
cubic yards x 201.97	=	gallons

### III. SIGNATURE:

I, \_\_\_\_\_, say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.



Signature of Well Driller

10-9-14

Date

**ELEVATION (FT AMSL)**  
BRASS CAP (MARKER) 6304.8

**DEPTH TO WATER (FT BGS)** 154.4 (7/29/2014)

**CONCRETE SURFACE PLUG** 0 TO 2 (FT BGS)  
USED 0.3 (FT<sup>3</sup>), CALC 0.2 (FT<sup>3</sup>)

**NEAT PORTLAND CEMENT** 2 TO 150.9 (FT BGS)  
USED 16.7 (FT<sup>3</sup>), CALC 11.7 (FT<sup>3</sup>)

**3/8-IN HYDRATED BENTONITE CHIPS**  
150.9 TO 278.0 (FT BGS)  
USED 9.1 (FT<sup>3</sup>), CALC 10.0 (FT<sup>3</sup>)

**SUMP** 273 TO 278 (FT BGS)  
**BOTTOM OF BORING** 281.5 (FT BGS)

GROUND SURFACE (TBD FT AMSL)

**SURFACE CASING** (cut level with concrete pad)  
MATERIAL STEEL  
ID (IN) 10 OD (IN) 10.75

**TYPE OF CASING**  
MATERIAL SCHD 80 PVC  
ID (IN) 3.8 OD (IN) 4.5  
JOINT TYPE FLUSH

**SCREEN 1**

**SCREEN 2**

**SCREEN 3**

**SCREEN 4**

**TerranearPMC**

Drafted By: TPMC Date: August 12, 2014  
Project Number: 86313 File Name: LAWS-01\_Final\_PandA

**LAWS-01 POST-ABANDONMENT CONSTRUCTION DIAGRAM**  
Los Alamos Canyon, Technical Area 72 (TA-72)  
Los Alamos National Laboratory  
Los Alamos, New Mexico

**Fig.  
X.X**

**NOT TO SCALE**