ESHID-600280

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: DT-9

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: 10/31/2016

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

4) Date well plugging began: 9/8/14 Date well plugging concluded: 12/9/14

5) GPS Well Location: East: 1628993.6
North: 1751492.6
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: 1308 ft below ground level (bgl), by the following manner: Video log of well on 9/9/14

7) Static water level measured at initiation of plugging: 1017 ft bgl

8) Date well plugging plan of operations was approved by the State Engineer: 09/18/2014

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):

Cement was emplaced with tremie pipe above 1308 ft bgl (plug recorded on LANL video logging equipment) to 1013 ft bgl. Cement emplacement was suspended due to cement loss out of the torch-cut screen slots. Bentonite was emplaced in the well casing from 1013 ft bgl to 284 ft bgl. The 12-in. well casing was then cut with a pneumatic casing cutter at 280 ft bgl. The field crew was unable to remove the upper 280 ft of 12-in. casing from the borehole. The 12-in. casing was re-cut at 40 ft bgl, but the upper 40 ft of 12-in. casing could not be removed from the borehole. Cementing was continued above 284 ft bgl inside the well casing. Cementing was suspended due to cement loss into the annulus at the 280 ft bgl casing cut. Bentonite was used to fill the annulus to 283 ft bgl. Cement was emplaced in the casing from 283 to 43 ft bgl. Bentonite was then used to seal the upper casing cut from 43 to 31 ft bgl. The casing was cemented from 31 ft bgl to surface.

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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	Portland I/II Cement	240 gallons	Casing: 182 gallons	Other	
31	Hydrated Bentonite	115 gallons	Casing: 72 gallons	Other	
43	Portland I/II Cement (annulus and casing)	2640 gallons	Annulus and casing: 1948 gallons	Other	
283					Note: Annulus diameter outside of 12" casing is unknown. Theoretical volumes are calculated based on assumed 18" borehole diameter.
	Hydrated Bentonite (annulus and casing)	8765 gallons	Annulus and casing: 13,049 gallons	Tremie	Annulus filled from 1501 ft bgl.
	Portland I/II Cement (annulus and casing)	1500 gallons			
1013					
	Portland I/II Cement (in casing)	2899 gallons cement Bentonite volume in above total.	Casing: 2322 gallons	Tremie	
1501					

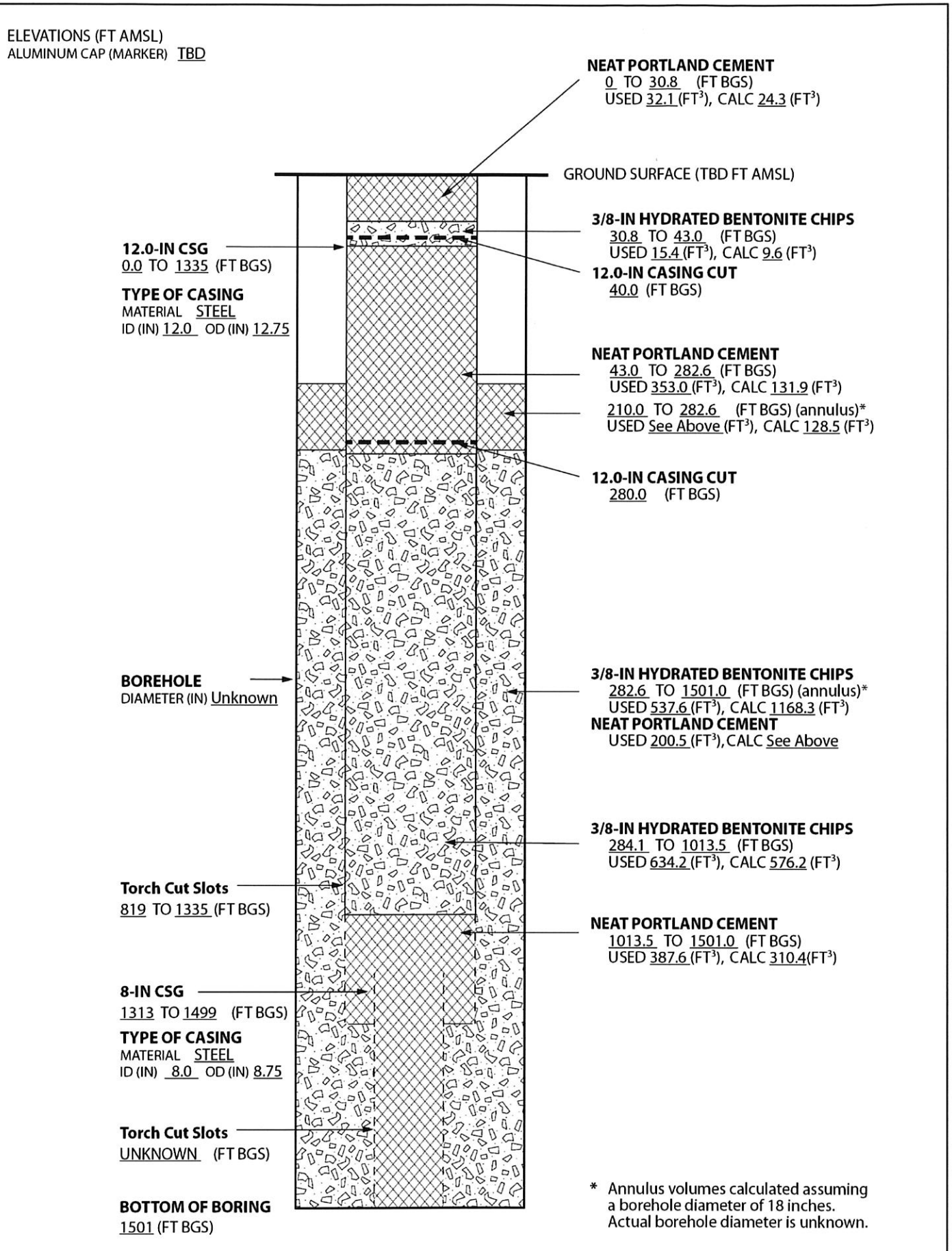
MULTIPLY		BY		AND OBTAIN
cubic feet	x	7.4805	=	gallons
cubic yards	x	201.97	=	gallons

III. SIGNATURE:

I, Jason Lamb, 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

2-19-15
Date



TerranearPMC	**DT-9 Post-Abandonment Construction Diagram**	Fig.
Drafted By: TPMC Project Number: 86313	Date: January 20, 2015 File Name: DT-9_Post_Abandonment	Technical Area 49 (TA-49) Los Alamos National Laboratory Los Alamos, New Mexico	**3.3-1** NOT TO SCALE