



AC-08
MONITORING WELL ABANDONMENT WORK PLAN
and BUDGET FORMAT

This Monitoring Well Abandonment Work Plan (WP) is for the routine abandonment of monitoring wells no longer needed for petroleum release investigation or cleanup, or needed by the owner/operator for their own purposes. Monitoring wells to which this WP applies include groundwater monitoring wells, soil vapor extraction wells, recovery wells, observation wells, sparge/injection wells, and piezometers.

Administrative Rules of Montana (ARM) 36.21.810 sets forth the legal requirements for properly abandoning monitoring wells. ARM 36.21.810 is attached and may be found at the following Internet address: http://www.mtrules.org/gateway/RuleNo.asp?RN=36.21.810.

Return this WP to: Petroleum Tank Cleanup Section, Montana Department of Environmental Quality, P.O. Box 200901, Helena, MT 59620-0901. Please note that incomplete and/or unsigned WPs will be returned and may delay processing of claims submitted to the Petroleum Tank Release Compensation Board.

Facility Name Pit Stop 23 Facility ID# 44-05097 Release # 890
Facility Address 117 West Main Street, Forsyth, Montana
Owner/Operator Name Hi-Noon Petroleum, 1101 South 6th Street West, Missoula, MT 59807
Owner/Operator mailing address, if different from above: Hi-Noon Petroleum 1101 South 6th Street West Missoula, MT 59807

Consultant's name, address, and phone number: Nathan Olson, WCEC, 1030 South Ave. W. Missoula MT 59801

List monitoring wells by name and number to be abandoned: PS1, PS2, PS16, PS17, PS18, PS19
Wells are 20 feet deep. Total 6 wells 120 feet of abandonment

List monitoring wells by name and number to be maintained: No wells will be maintained.

Specify the method by which the monitoring wells will be abandoned: Casing removed from ground void space filled with hydrated bentonite, surface repaired to match surrounding area.

Target date for abandonment of the monitoring well(s): 10/31/26

Unit cost per monitoring well for abandonment (include mobilization, Portland cement, grout or bentonite, equipment, and consultant or contractor labor costs): \$ /well \$ /ft

Total cost of abandoning the above-listed monitoring wells: \$ see attached

I elect to maintain the monitoring wells located at the above-referenced Facility and will monitor the wells at least every three years and in accordance with applicable requirements of the Montana Department of Natural Resources & Conservation Division.

X I elect to abandon the monitoring wells located at the above-referenced Facility and certify that the above-referenced monitoring wells are to be properly abandoned in accordance with the provisions ARM 36.21.810 and other applicable requirements of the Montana Department of Natural Resources & Conservation Division.

(Signature of Facility owner or operator or authorized representative)

(date)

36.21.810 ABANDONMENT

(1) Wells which have not been monitored for more than three years shall be deemed abandoned unless written permission is obtained from the board to maintain the well.

(2) Monitoring wells that have outlived their useful purpose shall be abandoned by one of the following methods:

(a) if the casing and screen are left in place, the casing and screen shall be sealed from the bottom up by the following methods:

(i) using a pump and hose or tremie pipe to conduct the sealing material to the bottom of the well; or

(ii) by filling the casing and screen with bentonite pellets or chips placed in a manner that will prevent bridging. Metal casings shall be cut off three feet below the ground surface and the last three feet backfilled with naturally occurring soils;

(b) the department recommends that the casing be removed in all possible instances. If the casing and/or screen are removed, the hole shall be filled with sealing material, concrete, or bentonite pellets or chips from the bottom up, as the casing and/or screen is removed. From six to three feet from the surface, bentonite shall be added to the well. The last three feet shall be filled with naturally occurring soils;

(c) the sealing material shall be bentonite pellets or chips, bentonite clay grout, neat cement grout, or concrete. The material may contain nonbiodegradable fluidizing admixtures, provided they will not contaminate the groundwater. Sealing materials which settle shall be topped to provide a continuous column of grout to within three feet of the surface; or

(d) other methods for abandonment with prior board approval.

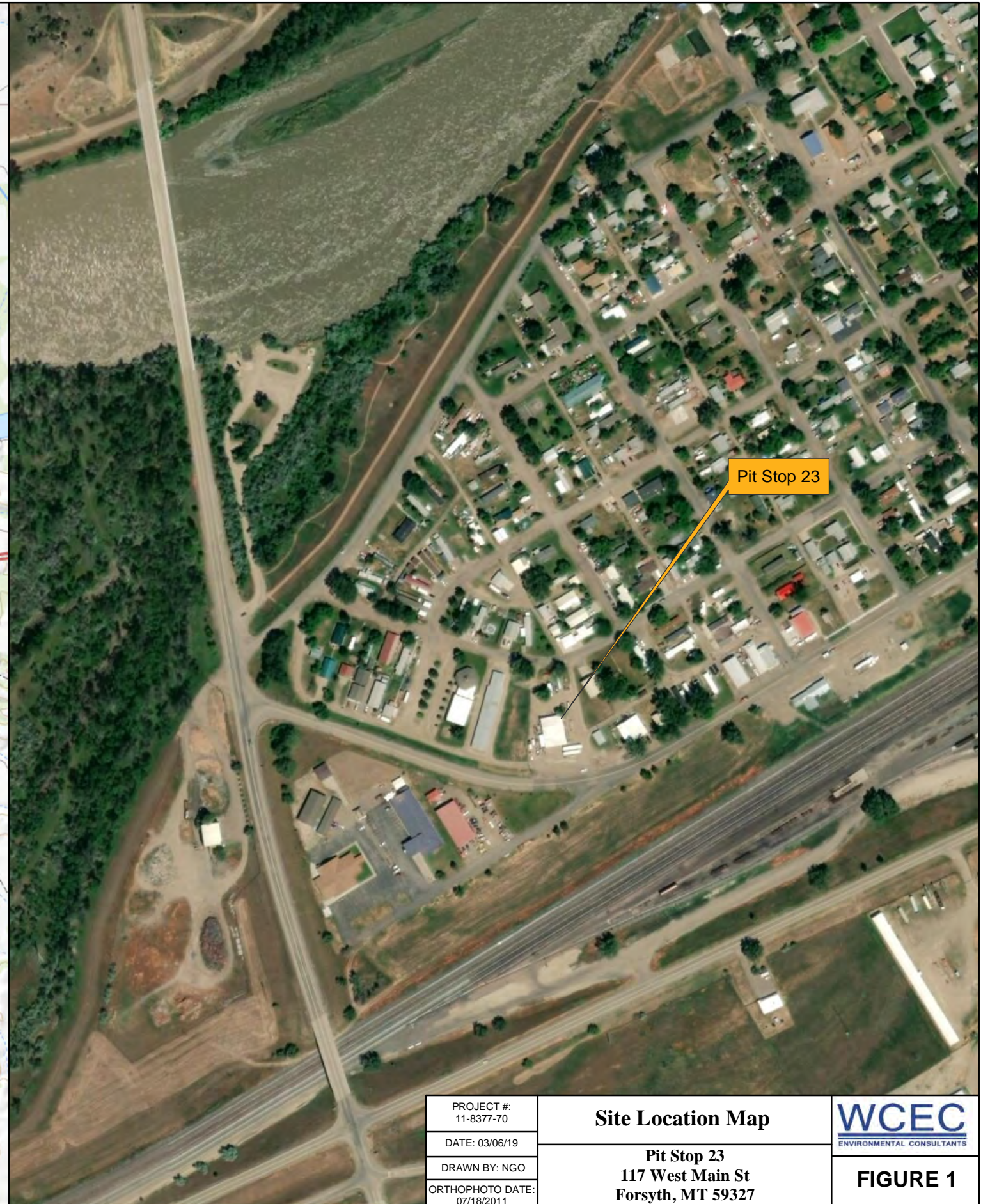
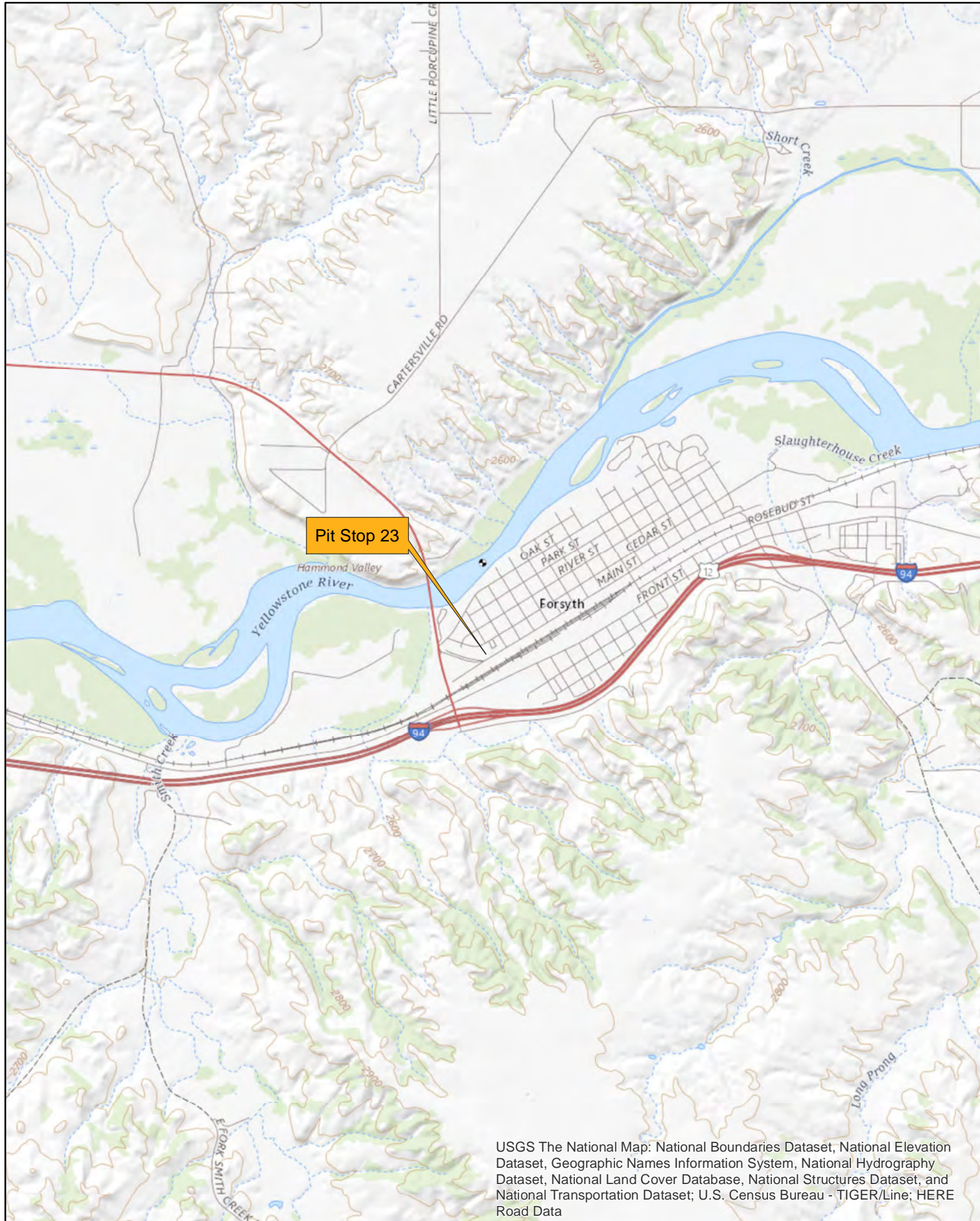
(3) For flowing wells, the abandonment procedures outlined in ARM [36.21.671](#) shall apply.

(4) A properly abandoned well shall not produce water nor serve as a channel for movement of water.

(5) A water well log report, fully describing all abandonment procedures, shall be submitted to the Ground Water Information Center (GWIC) of the MBMG within 60 days of abandoning the well.

History: [37-43-202](#), MCA; [IMP](#), [37-43-202](#), MCA; [NEW](#), 1990 MAR p. 739, Eff. 4/13/90; [AMD](#), 1991 MAR p. 913, Eff. 6/14/91; [AMD](#), 1997 MAR p. 65, Eff. 1/17/97; [AMD](#), 2010 MAR p. 1614, Eff. 7/16/10.

For additional information or requirements for abandoning or maintaining monitoring wells, please contact the Montana Department of Natural Resources & Conservation, Board of Water Well Contractors at (406) 444-6643.



PROJECT #: 11-8377-70	Site Location Map	WCEC ENVIRONMENTAL CONSULTANTS
DATE: 03/06/19		
DRAWN BY: NGO	Pit Stop 23 117 West Main St Forsyth, MT 59327	FIGURE 1
ORTHO PHOTO DATE: 07/18/2011		



Legend

- Monitoring Well
- Historic Monitoring Well
- Telephone
- Sewer
- TPH isoconcentration in soil
- Gas
- Fiber
- Electric
- Approximate limit of UST Excavation
- Property parcels

Pit Stop 23
 117 West Main St
 Forsyth, MT 59327
 Project No. 14-10045-70

Site Details Map

DRAWN BY: NGO	DATE: 08/25/22	SOURCE: Google Earth	IMAGERY DATE: May 21, 2014
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 ENVIRONMENTAL CONSULTANTS

FIGURE 2