



# AE Order Number Banner

## Report Description

This report shows an AE Order Number in Barcode format for purposes of scanning. The Barcode format is Code 39.



**App Number:** pWCO0127033627

**3RP - 381**

**BP AMERICA PRODUCTION COMPANY**

7/13/2018

## Smith, Cory, EMNRD

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**From:** Smith, Cory, EMNRD  
**Sent:** Tuesday, July 3, 2018 7:13 AM  
**To:** 'Moskal, Steven'  
**Cc:** Fields, Vanessa, EMNRD; Griswold, Jim, EMNRD; Powell, Brandon, EMNRD; Bayliss, Randolph, EMNRD  
**Subject:** RE: GCU 170 - Soil Sampling Report in Response to Elevated Sulfate in GW

Steve,

OCD has reviewed BP email response below. OCD understand that BP was following the specifications of the land owner, However it is BP responsibility to ensure that the soils returning to the excavation do not contain any possible contaminates which could endanger fresh water, public health or the environment. Therefore BP's request for no further action due to elevated sulfates at the Gallegos Canyon Unit 170 has been denied. BP will need to submit to the OCD a work plan for continued monitoring and/or remediation no later than August 10, 2018.

Cory Smith  
Environmental Specialist  
Oil Conservation Division  
Energy, Minerals, & Natural Resources  
1000 Rio Brazos, Aztec, NM 87410  
(505)334-6178 ext 115  
[cory.smith@state.nm.us](mailto:cory.smith@state.nm.us)

**From:** Moskal, Steven <Steven.Moskal@bp.com>  
**Sent:** Thursday, May 3, 2018 9:57 AM  
**To:** Smith, Cory, EMNRD <Cory.Smith@state.nm.us>  
**Cc:** Fields, Vanessa, EMNRD <Vanessa.Fields@state.nm.us>; Griswold, Jim, EMNRD <Jim.Griswold@state.nm.us>; Powell, Brandon, EMNRD <Brandon.Powell@state.nm.us>; Bayliss, Randolph, EMNRD <Randolph.Bayliss@state.nm.us>  
**Subject:** RE: GCU 170 - Soil Sampling Report in Response to Elevated Sulfate in GW

Cory,

BP has sampled the source area of the borrow material used to backfill the excavation at the GCU 170. The results of the sampling indicate the imported soil is the likely source of the elevated sulfate in groundwater. Attached is a report documenting the borrow area sampling conducted by Blagg Engineering. This is further supported in the attached Hand Auger Report, initially submitted the NMOCD on December 8, 2017. The data from HA-1 and HA-2 show background, or native, sulfate levels below the levels found in the imported soils in the HA-3 sample location.

The use of this backfill material was specifically required by the surface landowner at the GCU 170, as documented in the attached email strings. BP initially sourced the borrow material from Envirotech. However, due to a personal conflict between the GCU 170 surface owner and Envirotech, the landowner directed BP to source the borrow material from a location of his choice, Paul and Son's borrow pit. BP executed the work as directed by the landowner. The

elevated sulfate conditions will likely persist due to the landowner's decision to source the material from the specified borrow pit.

A small segment of the backfilled area, contains the borrow material from Envirotech. I have highlighted this area on Page 8, Figure 2 of the attached 2013 & 2017 Gen. Chem. Lab Summary Report. Both MW-4A, immediately upgradient of the Envirotech material and MW-9 exhibit, directly downgradient of the Envirotech material exhibit no elevated sulfate concentrations.

Had the landowner allowed BP to operate per the original scope, the elevated sulfate concentrations in groundwater would have not likely occurred at the site. BP incurred significant costs to meet the request of appeasing the landowner by removing already imported soil from the Envirotech borrow area and increasing the trucking time to import from the specified pit.

Further, due to conditions independent from oil and gas operations, the groundwater at the site is not usable for any use other than irrigation and does not pose any significant risk to drinking water supply, human health or wildlife/livestock. The location of the site is surrounded with septic systems and other activities contributing to poor groundwater conditions which are not related to oil and gas activities.

Also attached, is laboratory analysis of produced water samples collected from the GCU 328 and GCU 259 saltwater injection wells. The results of the sulfate in both the wells are significantly lower than the concentrations found in the groundwater at the GCU 170 and can be extrapolated to be significantly lower than the soil concentrations.

Thank you,

**Steve Moskal**  
BP Lower 48 – San Juan  
Field Environmental Coordinator  
Phone: (505) 330-9179



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**From:** Smith, Cory, EMNRD [<mailto:Cory.Smith@state.nm.us>]  
**Sent:** Monday, April 23, 2018 3:55 PM  
**To:** Moskal, Steven  
**Cc:** Fields, Vanessa, EMNRD; Griswold, Jim, EMNRD; Powell, Brandon, EMNRD; Bayliss, Randolph, EMNRD  
**Subject:** RE: GCU 170 - Soil Sampling Report in Response to Elevated Sulfate in GW

Steve,

OCD has reviewed the supplemental investigation report submitted on December 8, 2017. After review OCD has determined the elevated sulfates in the local ground water are likely due to BP operations and therefore

denies BP's request for no further action at this time. Additional ground water monitoring/remediation will be required. BP will need to provide a proposed plan to monitor/remediate the sulfates no later than June 15, 2018.

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**From:** Moskal, Steven <[Steven.Moskal@bp.com](mailto:Steven.Moskal@bp.com)>  
**Sent:** Friday, December 8, 2017 1:00 PM  
**To:** Bayliss, Randolph, EMNRD <[Randolph.Bayliss@state.nm.us](mailto:Randolph.Bayliss@state.nm.us)>  
**Cc:** Smith, Cory, EMNRD <[Cory.Smith@state.nm.us](mailto:Cory.Smith@state.nm.us)>; Fields, Vanessa, EMNRD <[Vanessa.Fields@state.nm.us](mailto:Vanessa.Fields@state.nm.us)>  
**Subject:** GCU 170 - Soil Sampling Report in Response to Elevated Sulfate in GW

Randy,

Please find the attached soil sampling report related to the elevated sulfate level in the groundwater at the Gallegos Canyon Unit #170; 3RP – 381. Please let me know if a hard copy of the report is required.

Regards,

**Steve Moskal**  
BP Lower 48 – San Juan  
Field Environmental Coordinator  
Phone: (505) 330-9179



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