



"STEWARDSHIP IN FORESTRY"

# Timber Sale Appraisal Cost Summary Beartooth Trout No.2 Sale 341-04-73

District: Coos

Date: 1/9/04

	Conifer	Hardwood	Total
<b>Gross Timber Sale Value</b>	\$2,199,054.87	\$43,920.23	\$2,242,975.10
		<b>Project Work</b>	(\$77,668.00)
		<b>Advertised Value</b>	\$2,165,307.10



# Timber Sale Appraisal Timber Description Beartooth Trout No.2 Sale 341-04-73

"STEWARDSHIP IN FORESTRY"

**District:** Coos

**Location:** Portions of Sections 33 & 34, T23S, R11W and Portions of Section 3, T24S, R11W, W.M., Coos County, Oregon.

**Date:** 1/9/04

**Stand Stocking:** 60%

Species	Avg. DBH	Amortized%	Recovery%
Douglas - Fir	28	0	95
Alder (Red)	16	0	90

Volume by Grade	Douglas - Fir	Alder (Red)	Total
3P	86	0	86
SM	149	0	149
2S	3,442	0	3,442
3S	1,091	0	1,091
4S	155	0	155
CR 14" - 22"	0	103	103
Total	4,923	103	5,026

**Comments:** Pond Values Used: 4th Quarter 2003.



# Timber Sale Appraisal Logging Conditions Beartooth Trout No.2 Sale 341-04-73

"STEWARDSHIP IN FORESTRY"

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<b>Combination#:</b> 1	Douglas - Fir	100.00%	
	Alder (Red)	100.00%	
<b>Yarding Distance:</b>	Medium (800 ft)		<b>Downhill Yarding:</b> No
<b>Logging System:</b>	Cable: Large Tower $\geq 70$		<b>Process:</b> Manual Delimiting
<b>Tree Size:</b>	Mature / Regen Cut (900 Bft/tree), 3-5 logs/MBF		
<b>Loads/Day:</b>	12		<b>Bd. Ft./Load:</b> 4,800
<b>Cost/MBF:</b>	\$61.63		
<b>Machines:</b>			
	Log Loader (A)		
	Tower Yarder (Large)		



"STEWARDSHIP IN FORESTRY"

# Timber Sale Appraisal Logging Costs Beartooth Trout No.2 Sale 341-04-73

Date: 1/9/04

Operating Seasons: 0.5

Profit & Risk: 15%

Project Costs: \$77,668

Other Costs (P/R): \$5,950

Slash Disposal: \$0

Other Costs: \$0

Miles of Road			
Dirt	Rock (Contractor)	Rock (State)	Paved
0.2	0.5	0.0	0.0

Road Maintenance: \$0.00

### Hauling Costs

Species	\$/MBF	Trips/Day	MBF/Load
Douglas - Fir	\$0.00	2.0	4.8
Alder (Red)	\$0.00	3.0	3.0



"STEWARDSHIP IN FORESTRY"

# Timber Sale Appraisal Logging Costs Breakdown Beartooth Trout No.2 Sale 341-04-73

Costs	Douglas - Fir	Alder (Red)
<b>Logging</b>	61.63	61.63
<b>Road Maintenance</b>	0.34	0.36
<b>Fire Protection</b>	0.28	0.00
<b>Hauling</b>	48.42	56.78
<b>Other (P/R appl.)</b>	1.21	0.00
<b>Profit &amp; Risk</b>	16.78	17.82
<b>Slash Disposal</b>	0.00	0.00
<b>Scaling</b>	2.00	2.00
<b>Other</b>	0.00	0.00
<b>Total</b>	130.66	138.59

<b>Amortization</b>	0.00	0.00
<b>Pond Value</b>	577.35	565.00
<b>Stumpage</b>	446.69	426.41
<b>Amortized</b>	0.00	0.00



"STEWARDSHIP IN FORESTRY"

# Timber Sale Appraisal Summary Beartooth Trout No.2 Sale 341-04-73

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## Amortized

	Douglas - Fir	Alder (Red)
MBF	0.00	0.00
Value	0.00	0.00
Total	0.00	0.00

## Unamortized

	Douglas - Fir	Alder (Red)
MBF	4,923.00	103.00
Value	446.69	426.41
Total	2,199,054.87	43,920.23

## Gross Timber Sale Value

**Recovery \$2,242,975.10**

Prepared by: Chris Rudd

Date: 1/9/04

District: Coos

Phone: (541) 267-1756

**SUMMARY OF CONSTRUCTION COST  
Beartooth Trout No. 2**

**Project No. 1A: Road Construction**

Points: C to D (Area I) Length: 1075' Type: 14' no ditch

**Clearing and Grubbing**

1.2 acres at \$834.00 \$ per acre = \$1,000.80

**Total clearing and grubbing \$1,000.80**

**Excavation**

Drill and Shoot	300	cubic yds at	\$3.00	per cu yd	\$900.00
Cat excavation and shape fill material	40	hrs at	\$125.00	per hr	\$5,000.00
Excavation	40	hrs at	\$110.00	per hr	\$4,400.00
Laborer	40	hrs at	\$30.00	per hr	\$1,200.00

**Total Excavation \$11,500.00**

**Hauling**

Endhaul to fill areas 25 hrs at \$60.00 per hr \$1,500.00

**Total Hauling \$1,500.00**

**Grade Road Surface**

1 hrs at \$75.00 per hour \$75.00

**Total Grading \$75.00**

**Project 1A Total \$14,075.80**

**Project No. 1B: Road Construction**

Points: G to H (Area II) Length: 886' Type: 14' no ditch

**Clearing and Grubbing**

1.3 acres at \$1,007.00 \$ per acre = \$1,309.10

**Total clearing and grubbing \$1,309.10**

**Excavation**

Drill and Shoot	1537	cubic yds at	\$3.00	per cu yd	\$4,611.00
Cat excavation and shape fill material (Between STA 2+85 and 4+90)	30	hrs at	\$125.00	per hr	\$3,750.00
Excavation	6639	cubic yds at	\$1.35	per cu yd	\$8,962.65
Excavator to prep waste area at Pt K	5	hrs at	\$110.00	per hr	\$550.00
Cat time for waste area at Pt K	20	hrs at	\$125.00	per hr	\$2,500.00
Laborer	60	hrs at	\$30.00	per hr	\$1,800.00

**Total Excavation \$22,173.65**

**SUMMARY OF CONSTRUCTION COST  
Beartooth Trout No. 2**

**Hauling**

Endhaul to fill area (STA 2+85 to 4+90)	4318	cubic yds at	\$0.50	per cu yd	\$2,159.00
Endhaul to waste area at Pt K	2121	cubic yds at	\$0.94	per cu yd	\$1,993.74
Endhaul to low spot in 2175 Rd	200	cubic yds at	\$0.60	per cu yd	\$120.00
				<b>Total Hauling</b>	<b>\$4,272.74</b>

**Grade Road Surface**

1	hrs at	\$75.00	per hour	\$75.00	
				<b>Total Grading</b>	<b>\$75.00</b>

**Project 1B Total \$27,830.49**

**Project No. 1C: Road Construction**

Points: I to J (Area II) Length: 1070' Type: 14' no ditch

**Clearing and Grubbing**

1	acres at	\$1,007.00	\$ per acre =	\$1,007.00	
				<b>Total clearing and grubbing</b>	<b>\$1,007.00</b>

**Excavation**

Drill and Shoot	695	cubic yds at	\$3.00	per cu yd	\$2,085.00
Cat excavation	20	hrs at	\$125.00	per hr	\$2,500.00
Excavation	4023	cubic yds at	\$1.30	per cu yd	\$5,229.90
Cat time for waste area at Pt K	20	hrs at	\$125.00	per hr	\$2,500.00
Laborer	40	hrs at	\$30.00	per hr	\$1,200.00
				<b>Total Excavation</b>	<b>\$13,514.90</b>

**Culvert Installation**

18" pipe (Point I) (includes installation)	40	feet at	\$12.00	per foot	\$480.00
18" band	1	band at	\$12.00	per band	\$12.00
				<b>Total Culvert Installation</b>	<b>\$492.00</b>

**Hauling**

Endhaul to fill areas (STA 7+25 to 9+00)	1399	cubic yds at	\$0.50	per cu yd	\$699.50
Endhaul to waste area at Pt K	2624	cubic yds at	\$0.95	per cu yd	\$2,492.80
				<b>Total Hauling</b>	<b>\$3,192.30</b>

**Grade Road Surface**

1	hrs at	\$75.00	per hour	\$75.00	
				<b>Total Grading</b>	<b>\$75.00</b>

**Project 1C Total \$18,281.20**



**SUMMARY OF CONSTRUCTION COST  
Beartooth Trout No. 2**

**Move-in**

Equipment	Miles	Mileage Factor	Equipment Allowance	Total
Excavator	30	0.66	\$533.00	\$351.78
D8 Cat	30	0.66	\$533.00	\$351.78
Grader	30	0.66	\$241.00	\$159.06
Drill & Comp	30	0.66	\$241.00	\$159.06
Dump Truck	30	0.66	\$144.00	\$95.04
Dump Truck	30	0.66	\$144.00	\$95.04

**Total Move-in                    \$1,211.76**

**Move Between Areas I and II**

Excavator	1	hrs at	\$110.00	per hour	\$110.00
Cat	1	hrs at	\$125.00	per hour	\$125.00
Grader	0.25	hrs at	\$75.00	per hour	\$18.75
Drill and Compressor	1	hrs at	\$95.00	per hour	\$95.00
Dump Trucks	0.5	hrs at	\$60.00	per hour	\$30.00

**Total Move-Between                    \$378.75**

**Project 1 Cost                    \$61,778.00**

**Project 2: Road and Landing Improvement**

Points                    A to B, B to C, E to F

Cat time for re-shaping road surfaces	4	hrs at	\$125.00	per hour	\$500.00
Smooth Road Surfaces (Grader)	10	hrs at	\$75.00	per hour	\$750.00

**Project 2 Cost                    \$1,250.00**

**Project 3: Trail Butte Rock Stockpile**

Location:                    3 mi on 2000 Rd  
 Measured amount:                    1000 cubic yards  
 Delivered amount:                    1200 cubic yards (20% expansion)  
 Size:                    1 1/2" - 0"

Cost per cubic yard at crusher:	\$7.00	per cu yd
Haul cost per cubic yard (1.4 hr. RT):	\$4.67	per cu yd
Piling and shaping cost per cubic yard:	\$0.53	per cu yd

Total cost per cubic yard:	\$12.20	per cu yd
Total cubic yards:	1200	cubic yards

**Total Cost for Stockpile rock:                    \$14,640.00**

**Project 3 Cost                    \$14,640.00**

**Total Project Costs                    \$77,668.00**

## TIMBER SALE SUMMARY

Beartooth Trout No. 2

1. **Type of sale:** Final harvest; Recovery, Sealed Bid.
2. **Boundary Lines:** Sale boundaries are marked on the ground with "Timber Sale Boundary" posters, red paint, and red flagging at locations shown on the Exhibit A.
3. **Revenue Distribution:** 100% CSL; 100% Coos County.
4. **Sale Acreage:** The sale area is 72 acres Net. The net acreage includes that area of the sale posted within the timber sale boundary signs. Green trees and buffer areas are posted outside the sale area and are not included in the net acreage calculation. The total sale area including buffers and green trees is 99 acres. The acreage was determined by ArcView software, a geographic information system.
5. **Volume by Species, Fund, and County:** See table on following page.
6. **Grade by Percent:**

Species	3 Peeler	Special Mill	2 Saw	3 Saw	4 Saw/Camp
Douglas-fir	2%	3%	70%	22%	3%
Hardwood	-----	-----	-----	-----	100%

7. **Cruise:** The unit was variable plot cruised using the big basal area factor method. A 250 BAF wedge factor was used for measure trees and a 40 BAF was used for count trees. Heights, diameter, form factor, grade and defect were taken on measure plots. Beartooth Trout No. 2 was cruised by ODF Foresters and compiled using Superace, in October 2003.

### A. Cruise Summary Data:

Diameter	Top Diameter	Form Point	Form Factor	CV %	SE %
D4H	Total Height	Conifer: 16' Hardwood: 16'	Recorded on all trees	54	7.1

### B. Stand Summary:

Species	D4H	Trees per Acre	Basal Area (ft <sup>2</sup> /ac)	BF per acre
Douglas-fir	28	49	243	68,376
Hardwood	16	13	19	1,509

- C. **Green Tree Retention Summary:** Minor Conifer species are reserved from cutting in the sale area. There will be scattered hemlock trees retained in Area I of the sale; fewer

hemlock trees will be retained in Area II. These trees were removed from the sale volume calculation. There are 5 trees on the east and west boundaries of Area I that are marked "W" in red. Three are hemlock and two are Douglas-fir. One spruce tree is marked with a "W" in Area II. The remaining Green trees (383 conifer and hardwood) are posted out of the sale and were excluded from the volume calculation using net acres as described in number 4 above.

**8. Timber Description:** Beartooth Trout No.2 is approximately 122 year-old second growth Douglas-fir, of good to average quality, with a small amount of alder understory. This stand of timber is high density on the ridges. Most of the low density alder patches are in the buffer areas. Trees are tall, from 160 to over 200 feet. The average diameter is about 28 inches throughout the unit. Area I will have higher per acre average volume than Area II, but the volume numbers shown in the "Volume by Species, Fund, and County" summary, reflect overall stand averages.

**9. Topography:** Area I has slopes that are relatively gentle (30-60%) compared to Area II which is steeper (50-70%). Area II is dissected by three drainages and one major ridge, with two intermediate ridges.

**10. Logging Method:** The sale will be cable logged uphill with single-end suspension over the unit. Full suspension will be required over designated streams and RMA's. A motorized carriage may be required to obtain the necessary suspension. The sale has three main landings. Area II of the sale is restricted from mechanized operations in early summer and subject to daily timing restrictions in the latter portion of the summer. The Purchaser must rock the spur roads to Area II in order to facilitate winter logging.

**11. Access:** From Coos Bay take the Coos River Highway to Allegany. Turn left on the County Road 47 (West Fork Millicoma) and continue for five miles. Turn left at Dean Mountain Road (2000). Area II is located six miles north on the 2175 Road. A portion of this sale is on the 2177 Road, a sharp left turn one mile from the start of the 2175 Road. Area II is located 6 ½ miles north on the 2000 Road. Turn east on the 2195 Road and follow it to the end.

**12. Projects:**

Project No. 1: Road Construction of three spur roads

Project No. 2: Road Improvement

Project No. 3: Road Surfacing

## NET VOLUMES AND ACREAGE

SALE AREA & SPECIES		Tree cnt. 100% Units	NET VOLUMES (MBF)							
			By County and Fund						Total Vols.	Vol. per Acre
Area	Spec		Coos			Douglas				
		CSL	BOF	Total	CSL	BOF	Total			
I	D-fir	1,983		1,983			0	1983	68.3	
	Hdwd	38		38			0	38	1.2	
II	D-fir	2,940		2,940			0	2940	68.3	
	Hdwd	65		65			0	65	1.2	
<b>TOTALS</b>				5026	0		0	5026		

**TOTAL SALE VOLUME BY SPECIES**

Douglas-fir      4,923 MBF  
 Hardwoods      103 MBF  
 Total Sale      5,026 MBF

Report by: Beartooth Trout No. 2

Date: 10/17/2003

Unit For. Norman Ellis Nov 14, 03  
 Date

Asst. Dist. For. Doug Kreimeyer 12/8/2003  
 Date

**UTILITY VOLUME NOT SHOWN TO PROVIDE FOR RETENTION OF DOWN LOGS  
 NO INGROWTH INCLUDED**

**ACREAGE BY COUNTY (to nearest acre)**

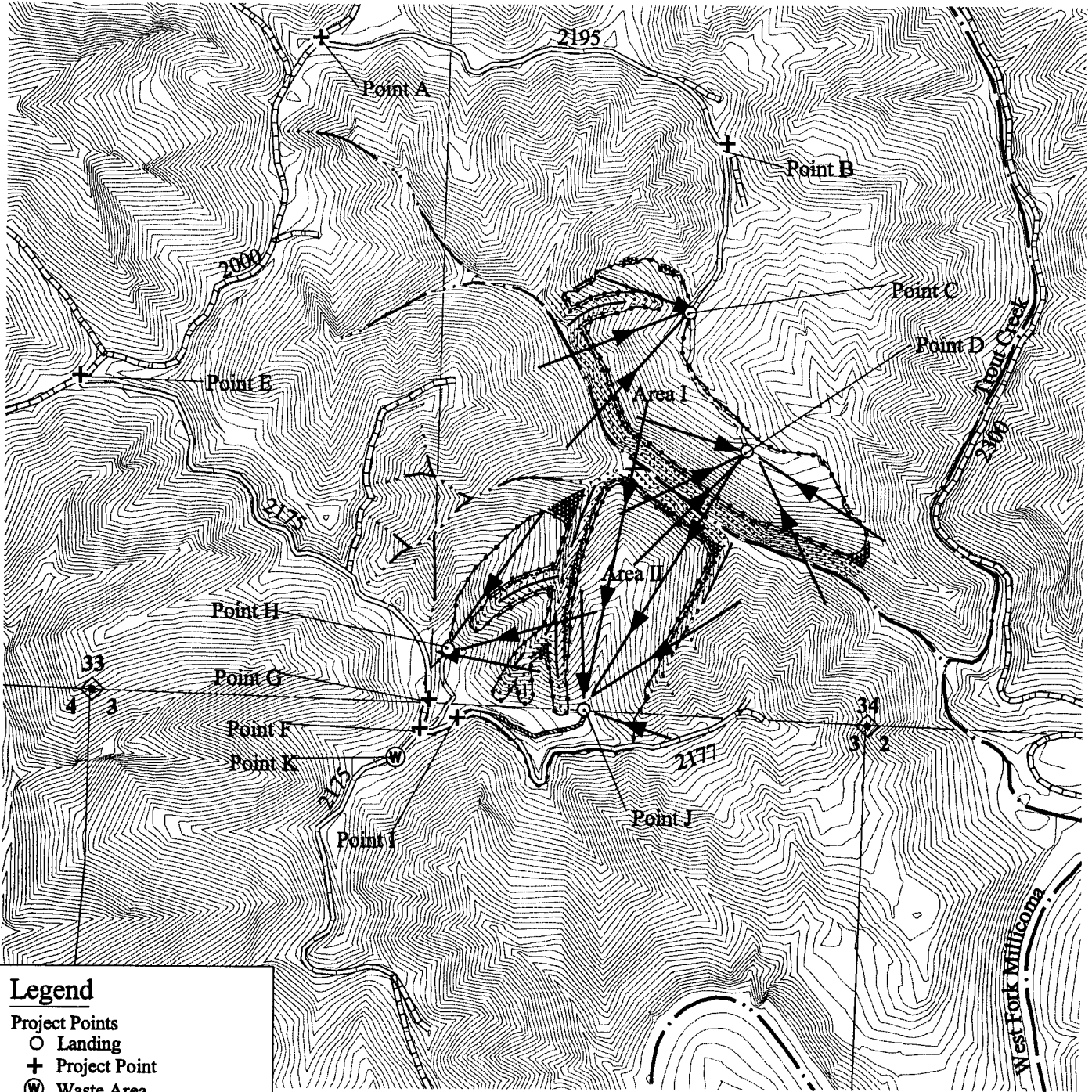
Sale Area	Coos County						Douglas County						TOTAL ACRES
	CSL			BOF			CSL			BOF			
	Conifer		Hard wood	Conifer		Hard woods	Conifer		Hard woods	Conifer		Hard woods	
	cc	pc		cc	pc		cc	pc		cc	pc		
I	29												29
II	43												43
SUM	72	0	0	0	0	0	0	0	0	0	0	0	72

cc- clearcut

pc- partial cut

BOF - Board of Forestry

CSL - Common School Land



**Legend**

- Project Points
  - Landing
  - + Project Point
  - ⊙ Waste Area
- Roads
  - ▤ State Maintained
  - ▥ Contractor Maintained
  - ▧ Roads New Construction
  - ▨ Surfaced
  - ▩ Unsurfaced
- Sale Boundary
  - ▭ Posted
- Streams
  - Type F
  - ▬ Type N
- Contours 20 Foot
- Yarding Corridors
- Reserved Trees
  - ▧ Buffer
  - ▨ Green Tree Retention

**LOGGING PLAN**  
 OF TIMBER SALE CONTRACT NO.  
 341-04-73  
 BEARTOOTH TROUT NO.2  
 PORTIONS OF SECTIONS 33 AND 34, T23S, R11W AND  
 PORTIONS OF SECTION 3, T24S, R11W, W. M.  
 COOS COUNTY, OREGON



APPROX. SCALE: 1" = 1000'



Area	Net Acres	Gross Acres
I	29	41
II	43	58
Total	72	99

DATE: October 10, 2003

# WRITTEN PLAN

**SALE NAME: Beartooth Trout No.2**

**LOCATION:** Portions of sections 33 and 34, T23S R11W, Coos County, Oregon

**LANDOWNER:** Oregon Department of Forestry; 63612 Fifth Road, Coos Bay, Or.

**CONTRACT PURCHASER:** \_\_\_\_\_

**NOTIFICATION NO:** \_\_\_\_\_

## **SITUATION AND PROTECTED RESOURCE**

The protected resource is a tributary to the West Fork of the Millicoma, a Type F stream.

## **LAYOUT**

Landings have been provided to enable best possible deflection for suspension of logs while yarding the sale area.

## **STREAM BUFFER**

A minimum 100 foot slope distance no harvest buffer has been posted on the ground in Areas I and II.

## **FELLING AND BUCKING**

1. Trees shall be directionally felled parallel to or away from stream riparian management areas (RMA's) as feasible.
2. High stumps shall be left as needed to minimize accumulation of logs in stream channels.

## **YARDING**

1. Operator will use a machine and logging system capable of fully suspending logs..
2. Operator will fully suspend logs when sufficient deflection is available.

## **OPERATIONS PLAN.**

Purchaser shall attach a yarding plan indicating landing locations, machinery and procedures to be used to obtain adequate suspension in the sale area and to minimize impacts during the felling process.

PREPARED BY: Norma Kline,  
Timber Management Unit Forester  
November 18, 2003

\_\_\_\_\_  
PURCHASER REPRESENTATIVE

DATE: \_\_\_\_\_

\_\_\_\_\_  
OPERATOR REPRESENTATIVE (if listed on notification)

DATE: \_\_\_\_\_